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EXCESSIVE VENERY  
MASTURBATION  
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CONTINENCE

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1891  
THE ETIOLOGY, PATHOLOGY AND TREATMENT OF THE  
DISEASES RESULTING FROM VENERAL EXCESSES,  
MASTURBATION AND CONTINENCE.

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## PREFACE.

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This volume contains the substance of a course of lectures delivered in the Medical Department of the University of New York, on the Results of Excessive Venery, Masturbation and Continence. In addition to the results of my own experience obtained in hospital and private practice, I have added the peculiar methods of treatment employed by various authorities in Europe and America, thus making the volume complete as a book of reference for the student and practitioner of medicine.

38 W. 24th St., New York,

J. W. H



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# EXCESSIVE VENERY, MASTURBATION AND CONTINENCE.

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## CHAPTER I.

### GENERAL CONSIDERATIONS.

Ignorance of Sexual Hygiene and its results—Should laws regulating Sexual Functions be taught before years of maturity are reached—Ignorance of Function in the Married State—Ignorance as a cause of Sexual Excesses and Masturbation—Instructive case—When and how to teach—Lessons to be regulated by the Mental and Physical peculiarities of the child—Fear as a Necessary Educational agent—A Clergyman's idea as to what should be taught of Sexual Physiology and Hygiene—The Schoolmaster as a guardian of Morals.

A knowledge of the sexual functions or of sexual hygiene is rarely considered to be a necessary part of our early education, and the value of such knowledge as promoting a healthy physical and mental condition is almost entirely overlooked. The age of puberty generally has passed, before the subject is introduced to the youthful mind even in the most casual way. Indeed there is scarcely a subject more completely ignored, although so much of the health and happiness of the race depends on it. The physician whose professional duties bring him a clearer insight into the private lives of his patients, beyond the point where ordinary vision reaches, is about the only one who fully realizes the great necessity for the diffusion of such knowledge, and an education that will prevent those ignorant assaults on the genital organs which in time stunt the vital forces, and whether cured or not, leave their impress on the vital forces of the patients themselves, as well as on their unfortunate offspring. Outside of the profession there are very few who ever get beneath the thin veneering to the rotten wood

below, and thus see the difference between the fictitious side of life, and the real or true life of suffering occasioned by ignorance and bad habits, which might easily be avoided by a little care and wholesome advice given by parents, guardians or teachers, or perhaps best of all by the family physician, for he really is the person fitted by his position to give the necessary information in the way or manner that will carry with it its full weight of conviction, and compel a sensible enforcement of the laws which regulate sexual functions, and he can also briefly explain such points in the anatomy and physiology of the organs under consideration, as will facilitate the patient's efforts to do what is expected of him in an intelligent manner. But unfortunately, as things are, at the present day, the damage is usually done before there is a full realization of the means for preventing it. So dense, indeed, is the general ignorance on this important subject that it is not an uncommon event for men and women to enter the married state without any preliminary knowledge whatever of the sexual relation.

Married women, and men too, of much experience in other matters pertaining to the management of their physical natures, have informed me that when they entered the marriage state, they were totally unaware of the nature of the sexual relation, and that many days and nights were passed in the midst of curious sensations, doubts and fears and ridiculous performances before the marriage was consummated. Neither did they comprehend the immediate or remote results of the new relation. They knew not the difference between temperance and excess until disordered nerves and feeble bodies compelled them to seek advice from parents and friends who had passed through the same trials and with similar experiences. And in many instances this advice was sought too late for benefit.

friends who were more versed in the matter than they were. This ignorance, of course, is more generally confined to women than to men, but there are enough instances among the latter, to make it a matter of surprise even to a physician who ought to be accustomed to surprises. As a case in point, the following instance may afford food for reflection. In the summer of '79 while sojourning in the Adirondacks, I was asked to visit a gentleman at a hotel in the neighborhood who was said to be in an advanced stage of pulmonary phthisis. He was about forty years of age, and had been an invalid for three years. Upon examining him, I found, that in addition to his phthisis, he was suffering from a perineal abscess, and a congenital phimosis. The latter had caused a chronic balinitis by preventing the secretions from being removed, and the parts from being washed. The extremity of the organ was so painful that the slightest touch gave him great distress. I opened the abscess in the perineum and it soon healed. The pain from the accumulated secretions around the glans, continued with little amelioration, except when relieved by opiates, and I finally slit the prepuce and exposed the inflamed and ulcerated glans and thus relieved him of the greater part of his suffering. He afterwards said to me, "Dr. I know now that if that operation had been performed when I was a boy, and I had been told anything about the normal condition of my genital organs, I would now be in good health, I would not now be dying from consumption. I blame it all on my parents. When I was a mere lad, I had every night a very painful erection which kept me awake the best part of the night. Again and again I went to my father and begged him to tell me where to go for relief, but he only laughed, and said it was all right. Like appeals to others had a similar result. Finally the irritation became

so great that without any instruction I commenced to masturbate, and finally went frequently with loose women to such an extent that my health broke down, my lungs gave out, and now I am dying. I never knew until too late what was the cause of my frequent erections, and I was never told that any relief could be afforded by an operation."

The most singular part of this matter is, that so much ignorance can exist where natural instincts alone might be expected to prompt man, as well as the lower animals.

The education of the youthful mind in these matters need not be thoughtlessly commenced, or hastily terminated. A gradual and systematic formation of correct ideas and habits, should be fostered as the growth of the boy or girl progresses. And the various steps should be taken with due regard to the mental or physical developement of the child, and necessarily must be varied to suit this or that particular case. The education should neither be superficial, nor hurried. The teacher must feel the responsibility he is assuming, and have a thorough perception of his work on each point before he undertakes it. The perceptive faculties of children are often much keener than we generally give them credit for, and, like older folk, they have different mental and physical peculiarities, which must receive special study before the necessary knowledge is conveyed to them. If the pupil has exhibited signs of unusual sexual precocity, it would be well to point out the results of all unhealthy familiarity with the genitals before discoursing upon their uses in the accomplishment of a most beneficent plan of nature, to imbue the mind with that laudable sense of fear which should invariably accompany any infringement of the law. Fear is an essential element in controlling this class, which has many, very many members. So many in-

deed are in this class in all walks of life as positive indications that their parents though living in a civilized and christian community, have broken every law as thoroughly as if they had "lived and moved and had their being," where vice prevailed and moral laws were unknown. Such children are often nothing but insignias of disgrace to their ignorant, though, perhaps, well-meaning parents.

With that other and much smaller class, who inherit healthy minds, as well as healthy bodies, with little or no disfigurement from exuberant natural passions, it is always safe to add to their general knowledge of anatomy and physiology some additional and special facts relating to the genito-urinary functions. The subject can be approached gradually, suiting the amount of information to the age of the child, and the general development of the perceptive faculties. The command to keep the hands away from the organs, if aided by the watchfulness of a faithful nurse, or mother, will generally succeed in enforcing this sanitary edict. At the same time it is well to see that all sources of temptation to examine themselves should be removed. The tight clothing with which the limbs of most children are encumbered by night, as well as by day, should be removed. Nothing tight, or irritating, or exceedingly warm, should be allowed either in the day or in the night, but especially at night, because then there is the additional weight of the bed clothing to be borne. From the warmth and superabundant moisture accumulating around the genitals irritation is engendered which naturally prompts the child to rub and finger its parts until the tendency to masturbation is fully formed, and the child is well on the road that leads to all sorts of excesses. Sometimes a warning voice reaches the innocent transgressor through the medium of a quack advertisement in a

book or newspaper. Fortunately, these advertisements often send the patient to the family physician, instead of to the charlatan. Yet whatever evils may arise from such quacking, one good at least is often accomplished, namely, the immediate suspension of the pernicious habit, whatever may be its nature. I have had many cases where the patient's reformation and subsequent restoration to health originated from perusing quack advertisements. I speak of this to show that the educated members of our profession are scarcely doing their duty to humanity by ignoring the importance, and by neglecting or making little of the subject. Fear of evil consequences is without doubt a great moral power in this world, and although it may not be the noblest propelling force, it cannot be dispensed with in the cases under consideration. We are all sadly human. Emerson, with a degree of truth, says that "there is a crack in everything that God has made," and this is undoubtedly true of poor human nature. We have not yet reached perfection and probably never will, and we must recognize the value of such a low moral force as fear in the enforcement of sanitary conditions in all matters relating to the sexual or genito-urinary organs.

The usual and conventional objection to this variety of education is, that at such an early age the understanding is not ripe enough for such knowledge, and that it might lead to the very evil that it was designed to avoid. If it were not apparent to every one that the evils and the diseases under consideration were almost universal as a result of ignorance, then that idea might be entertained, but no one can possibly object under existing circumstances to giving the child legitimate knowledge on a subject of such vital importance, where insufficient teaching has produced such unfortunate results.

Acton publishes the remarks of a clergyman who seems to have been blessed with more than the ordinary amount of clerical common sense on this question. He says: "Advantage could and ought to be taken of the opportunity when a boy says his catechism to explain to him the meaning of some of the terms therein contained. When a child is taught to 'keep his body in temperance, soberness and chastity,' it would not be difficult to explain to him what chastity is, instead of leaving him to find it out as best he may. He might be given to understand that it does not merely mean that all indecency and foul language must be shunned. The child might be told that he must keep from meddling with his secret parts, except when the necessities of nature require it, and that any emotion he may experience in these members must not be encouraged, and all thoughts which originate in them must be avoided. And when he grows older every boy should be taught that chastity means continence; that if he would be chaste he must not by any act of his own, or by the indulgence of lascivious imaginations, cause the fruit of his body to be expended. He should be taught that all such expenditure is a drain on his system, and weakens the powers which God has given him to be employed only in the married state. He may be sure that 'his sin will find him out,' and if he marries with his powers undermined by unlawful gratification it will be visited upon his children also. If he is old enough to understand the subject, the youth entering upon puberty might have explained to him some of the mysteries of life; probably it would not be incompatible with his age to explain to him that the life of the animal and vegetable kingdoms is continued and increased through the power of reproduction, with which the Creator endowed the whole produce of the earth. It is the nature of every herb that it 'yieldeth seed,'

and of the fruit tree yielding fruit that its 'seed is in itself' (Gen. i, 12). It is the nature of every living creature 'to be fruitful and multiply' (Gen. i, 28). This power of reproduction or of generation constitutes the very essence of life. To enable this vital function to be fulfilled, every plant and every animal is furnished with organs of reproduction. As it has organs of respiration for breathing the air, organs of motion, organs of digestion for assimilating its food, so it has organs of reproduction for handing on the life it has received, and reproducing itself in its offspring. This is the most important function of the whole vital economy of every living form. We might further explain to him that our life is bound up with the reproductive organs of the body. Now what every young man, and boy also, ought to know about himself is this: The two appendages of the body,—of which we are too modest to speak,—but which the Holy Scriptures calls the stones, and medical men the testes or testicles, form the laboratory of the human body, where, by a process of which we are quite unconscious, the blessing given to man at the creation is being fulfilled, and out of the system a vital fluid which is the very 'essence of life,' the source of being, is being constantly produced from the time of puberty, to be employed, when he reaches maturity, not in the gratification of the lusts of the flesh but in the procreation of children. The boy might be taught the immense importance to the human constitution of this vital substance, the seed of the man which is elaborated by the organ of reproduction, and it should be made clear to him how terrible the consequences must be if the life be continually flowing away from the body. The opportunity might be taken of informing the youth that many whose lives are outwardly pure have fallen into secret sins and wasted their substance in solitary indulgence. And the consequence

of such indulgence is not limited to the act itself, but the violated body becomes unable to contain its treasure, and as fast as it is elaborated the seed is poured away on the slightest provocation in sleep and in the performance of the acts of nature.

“He might further be informed that many of the sicknesses to which we are subject may be traced to this cause, and that many of those complaints set down as nervous debility, much languor and loss of spirit, much feebleness of mind, much dimness of sight, much loss of manly bearing,—to which we must add many cases of the loss of reason and an imbecile and driveling old age,—are the inevitable result of the expenditure of the vital forces in sinful gratification.

“I would further instruct a youth that this degrading practice obtains such a hold upon any one indulging in it that he seems unable to free himself from its grasp. Again and again he yields to its importunity, and life ebbs away from him,—mind and body becoming undermined. It is a sad and melancholy truth that many whose childhood has been most pure and spotless have fallen most deeply when their passions have been awakened through absence of all warning on the subject and in ignorance of the self-destruction they were committing.”

Besides this instruction given by the family physician, the tutor, or the schoolmaster under whose eye the ordinary school knowledge is inculcated, should maintain a degree of watchfulness over the boy which would enable him to detect any private irregularities, and he should also add (with the advice of the physician) any further lessons as to the best methods of regulating generally the sanitary condition of the youthful pupil. Upon this point the same author says: “I maintain that a conscientious schoolmaster’s task does not end with providing for cleanliness, decency, and exercise among his boys. In spite of

his assumed ignorance of the practice, masturbation and other vices may spread widely through the school unless careful supervision be employed. Against these secret evils there is no better safeguard within his reach than a steady endeavor to raise the moral tone of the whole school by means of the upper forms, so that the older boys may of their own accord join in discountenancing any ungentlemanly or disgraceful conduct. Without some such auxiliary, the efforts of the best-intentioned master to prevent the practices, with their demoralizing accompaniments and consequences, will be almost powerless. How diffused secret wickedness may become in schools appears every now and then in scandals so dreadful that the natural tendency of all concerned is to hush them up and forget them as soon as possible. Indeed, it is impossible not to sympathize with the feeling that to be obliged seriously to doubt as to the manliness and, in a rough way, of the purity of our large schools, would be a great calamity. And in the main, this confidence has been, no doubt, hitherto justified. Still there are points on which I think all concerned may be a little too confident, not to say remiss. One in particular I wish to mention. (I can hardly do more.) It seems to me clearly included within the scope of these remarks. I think a schoolmaster should be alive to the excessive danger of the platonic attachments that sometimes become fashionable in a school, especially between boys of very different ages. I am not speaking of ordinary boyish friendship,—than which there can hardly be a greater blessing,—either during boyhood or in after life. \* \* \* I am speaking of what schoolmasters cannot be ignorant of,—the sentimental fancy taken by an elder boy to a younger, between whom there can be, in the regular course of the school, little natural companionship, and having about it a most unpleasant and danger-

ous resemblance to abnormal passion. I know that such attachments have led to most melancholy results. I have been made aware that some public school men have declined masterships in their own school because they knew the custom prevailed,—which they were alike unable to sanction and afraid to attack. I have been informed that it has been preached at, not obscurely, from school pulpits; and I could point to living men, with a wretched burden of recollection from it on their consciences, which they would give the world to erase."

There is, no doubt, a vast deal of truth in what Mr. Acton says on the point of immorality in public and private schools, and that the pupils,—good, bad, and indifferent,—need watching; but I would hardly agree with him in looking with a suspicious glance on all the friendships of boys differing in age with each other. I would see that the precepts inculcated in the previous pages were frequently dwelt upon, exercise a due amount of care in rooming, and observation of their habits, and leave the rest to the innate manliness of the boy himself.

## CHAPTER II.

### THE GENITAL APPARATUS.

Anatomy and Functions of certain portions of the Male and Female Genital Organs—Erectile Tissue—Peculiarities of Erectile Tissue—Unstriped Muscular Fibres in the walls of the Trabeculæ—Blood Supply of the Erectile Tissue of the Penis—Buck's fascia—Structure of the Corpora Cavernosa and Corpus Spongiosum—Action of Muscles on those Organs—The Glans Penis—Changes in the glans from Masturbation and Sexual Excess—Dorsal Artery of the Penis—Membranous Urethra—Cowper's Glands—Character of the Secretion—Prostatic Urethra—Veru Montanum—Caput Gallinaginous—Prostatic Ducts—Ejaculatory Ducts—Morbid changes from Masturbation—Prostate Gland—Internal Structure—Vascular Supply—Communication of Prostatic Plexus with Hemorrhoidal veins—Influence of Constipation on the Prostate and adjacent Parts—Testicles—Tubuli Semeniferi—Cells in which Spermatozoa are manufactured—Vas Deferens—Vesiculæ Seminales—Parts of Female Genitals concerned in Masturbation—Clitoris—Labia Minora, etc.

In order to gain a clear conception of the diseases we are about to study, it will be advisable to briefly examine the various tissues which enter into the formation of the genital organs as they exist in health, and also to study the functions of the organs in their healthy state, before we proceed to the consideration of those morbid changes which take place in the tissues as the result of excesses, or of unnatural habits.

In the space known as the perineum are the organs to be studied. Here we find located the neck of the bladder, the prostate gland, urethra, penis, scrotum, testicles, anus, and lower part of the rectum. In the female, the same region contains the labia, clitoris, urethra, mons veneris, glands of Bartholinæ and their ducts, and the entrance to the vagina.

## ERECTILE TISSUES—PENIS.

Erectile tissue invariably consists of interlacing bands of yellow elastic, and white fibrous tissue, and unstriped muscular fibres, which form irregular spaces, enclosing rich plexuses of bloodvessels. It forms the principal part of the penis, being found there in the form of three cylindrical masses, viz: the corpora cavernosa, and the corpus spongiosum. Erectile tissue is also found in the labia minora, clitoris, vaginal walls and ovaries, the nipple of the mammary gland, and the schneiderian membrane. The principal characteristic of this tissue is its great capacity for distension.

The corpora cavernosa, the two upper cylinders of erectile tissue which form the penis, arise from the tuberosity of the ischium, by two crura, which unite under the pubes and continue on until they terminate in two rounded extremities in the expanded end of the corpus spongiosum, known as the glans penis. Each cylinder is surrounded by a dense fibrous covering in which elastic fibres predominate, and in which also are situated muscular fibres of the unstriped variety. This incloses the erectile tissue proper. The erector penis, a muscle which is intimately connected with the crura, arises from the inner side of the tuberosity of the ischium (Gray) from the crus, and from the ramus of the pubes, and passing upwards and inwards terminates in an aponeurosis that is attached to the side and under surface of the crus. This muscle compressing the crura prevents the return of the venous blood, and thus assists in keeping up an erection of the organ.

The corpus spongiosum, the remaining cylinder of erectile tissue, is situated immediately beneath the junction of the corpora cavernosa. It commences in front of the triangular

ligament by a slight enlargement, called the bulb, passes forward and ends in another expansion, the glans penis, which, as before stated, receives the rounded end of the corpora cavernosa. The glans penis is covered by a mucous membrane, the continuation of the mucous membrane of the urethra. In a normal condition the glans has a pinkish color and is highly sensitive ; and it is protected by a fold of the integument covering the penis called the prepuce. Where masturbation has been indulged in or the party has been guilty of excesses for any great length of time, the mucous covering of the gland assumes more of the character of ordinary integument and loses its sensitiveness, while the prepuce, instead of covering it, is wrinkled back to the base of the corona glandis. The spongy portion of the urethra is contained in the corpus spongiosum, extending from the membranous portion to its termination in the meatus urinarius. There is nothing special to be noted in this portion of the canal, except that the ducts of Cowper's glands open on its floor about half an inch from its commencement. The corpus spongiosum is intimately connected with the accelerator urinæ, a mass of muscular fibres which are arranged in three layers in the median line of the perineum. The layers arise from the tendinous center of the perineum. The anterior layer of fibres is inserted into the side of the corpus cavernosum, but the principal portion of them pass up to the dorsum of the penis, terminating in a fibrous expansion which, when the muscles contract, compresses the dorsal vein. The middle fibres surround the bulb and the adjacent portion of the corpus spongiosum and join with the fibres of the opposite side on the superior portion of the same body. The posterior portion or layer is spread out on the anterior ligament. This muscle assists in erection by compressing the bulb and a portion of the corpora

cavernosa. It also assists in expediting the flow of urine, and in the expulsion of the last few drops of urine which remain in the lower part of the urethra. The other muscles of the perineum have no special relation to the points under consideration, and need not therefore be studied here.

The bulb of the corpus spongiosum can be felt through the ridge in the median line of the perineum. The membranous portion of the urethra extends from the apex of the prostate to the triangular ligament in front. Around this portion of the urethra is attached the compressor urethræ, or "cut-off" muscle. (It is important to remember the attachments and action of this muscle, as we shall see further on.) It arises from the ramus of the pubes on each side, passes inward and divides into two parts, one going above the urethra and the other going below it, the two parts ultimately uniting in the median line. Immediately underneath this muscular layer there is a circular layer of unstriped muscular fibres, which is continuous with the circular fibres of the prostate and bladder behind, and with the circular layer of fibres in the spongy urethra in front. The muscle is supplied by muscular branches of the pudic nerve. Irregular or spasmodic action of this muscle may interfere both with the expulsion of the urine and the emission of semen.

The membranous portion of the urethra measures three-quarters of an inch in length. Underneath its anterior part the glands of Cowper are situated. They are surrounded by the transverse fibres of the compressor, and their ducts, an inch in length, pass forwards and open on the floor of the bulbous portion of the canal. They secrete a viscid, glutinous fluid which appears in small quantities when there is much sexual excitement. It is exceedingly profuse when there is much relaxation of the genitals from masturbation or excessive sexual inter-

course. It resembles the white of an uncooked egg more than anything else. It is said to perform the same function in the male that the secretion of Bartholin's gland does in the female, viz : the lubrication of the organ during sexual intercourse.

The prostatic portion of the urethra is situated in the substance of the prostate gland, and extends from the neck of the bladder to the apex of the prostate, or commencement of the membranous portion of the urethra. It measures one inch and a quarter in length. On the floor of the prostatic urethra, the body known as the veru montanum or caput gallinaginous is situated. It is raised one or two lines above the level of the mucous membrane. The supply of nervous elements, and fine capillary bloodvessels to this organ is much greater than it is to any other portion of the urethra, hence it is supposed to be, and undoubtedly is, the principal seat of the peculiar sensations which terminate the action of coitus. In front of the veru montanum is a pouch called the sinus pocularis. At the orifice of this pouch are found the orifices of the ejaculatory ducts through which the seminal fluid is poured into the canal of the urethra. The ducts are formed by the union of the duct of the vas deferens with the ducts of the vesiculae seminales. On each side of the veru montanum the ducts from the prostate glands open. In cases of confirmed masturbators, all these ducts are immensely increased in size and the veru montanum is elongated and hypertrophied to such an extent as to occasionally afford an obstacle to the passage of the sound or bougie, catching on the point of the instrument, and very liable to be torn. The sound in passing over this portion of the canal also causes intense pain, a point which I regard as diagnostic of onanism, or excessive sexual indulgence, except where inflammation of the prostate exists of an acute char-

acter. The penis, which is made up of all the tissues just described, has an exceedingly loose integumentary covering, which contains little or no subcutaneous fat. The integument is prolonged over the glans to form the prepuce. In a healthy condition, the prepuce should cover the glans and protect it. When masturbation has been persisted in for any length of time, the veins of the integumentary covering of the penis become very much enlarged and tortuous, and the skin itself becomes of a dull yellow color, with a tendency to wrinkle. The dorsal artery of the penis may be felt pulsating between, in the furrow made by the union of the corpora cavernosa. The penis is held in position by a dense layer of fibrous tissue, which forms the suspensory ligament. It is attached to the symphysis pubis, and thence spreads out over the penis, enveloping the corpora cavernosa and then splitting to form a sheath for the corpus spongiosum. This tissue is known as Buck's fascia, and is continuous below with the superficial layer of the triangular ligament.

The vascular plexuses in the erectile tissue of the penis secure their principal supply of blood from the dorsal artery of the penis (a branch of the internal pudic) though the artery of the bulb, and the arteries of the corpora cavernosa, also furnish some. From eight to twelve branches arise from the main trunk, and surround the penis, anastomosing with those below, and finally piercing the corpora cavernosa. Langer says that some of the arteries terminate in capillaries, as other arterial capillary arteries do, while the others terminate directly in the venous spaces of the erectile tissues by funnel-shaped orifices. The arteries of the corpus spongiosum terminate in ordinary capillaries. Rouget says, "the arterial trunks in the bulb and at the roots of the corpora cavernosa do not divide

in the usual way into dichotomic branches, but are surrounded on all sides by branches of vessels, which arise from three to ten in number, from short common trunks. These vessels are not merely short diverticula, but traverse for some distance the large sinuses of the corpora cavernosa and of the bulb, and penetrate, after numerous anastomoses and subdivisions, especially about the periphery, the muscular trabeculæ. After traversing these fibres, the arteries pass through the surface, through slit-like openings ; but from their origin to their termination in the muscular fibres, the vessels from the arterial branches are twisted on themselves in abrupt and closely compressed spiral folds, interlacing, entwining, and anastomosing, so as to form a sort of vascular tangle, and this, unlike any simple flexions which a slight distension suffices to obliterate, persists during even complete erection, and closely resembles a beautiful network."

The penis receives its nervous supply from branches of the pudic, and the cavernous plexus of the sympathetic. The latter is distributed mainly to the erectile tissue of the corpora cavernosa, while the former is distributed to the integument and to the urethra (Kolliker).

#### PROSTATE GLAND.

The gland which surrounds the prostatic urethra also plays an important part in the diseases under consideration. It extends from the bladder to the membranous urethra, the muscular fibres being continuous behind with the circular fibres at the neck of the bladder, and in front with the circular fibres of the membranous part of the urethra. The principal part of the muscular tissue of the gland is found at the circumference, while the follicles which form the glandular portion

of the organ are located in the interior. From the cortical muscular layer, bands of muscular fibres pass to the interior or center of the gland, and between these cords or bands all the glandular tissue of the prostate is situated (Stricker). There are also bands of striped muscular fibres, blending or passing between the layers of smooth muscular fibres. Some few of these bands pass also into the interior of the gland, or glandular substance.

The nervous supply to the gland is very considerable. Large nerve trunks containing a great number of ganglion cells pass upwards to the superficial muscular layer. Medullated nerve trunks are also found in the cortex, connected with large ganglion cells.

A plexus of veins, closely packed, also surrounds the gland. The veins are of greater size than usually obtains in ordinary venous plexuses. The dorsal vein of the penis terminates in this plexus, returning the blood to this point from the principal portion of the penis. This plexus of veins also communicates with the hemorrhoidal and inferior mesenteric plexuses. It can thus be seen what an important factor constipation would be in promoting congestion of the prostate and its connections. Any obstruction at this point, no matter what its nature, must necessarily conduce to a continuance of nocturnal pollutions and other allied affections. Indeed, indirect obstruction to the return circulation does more harm than is generally supposed. With regard to the function of the prostate, there is some difference of opinion. It undoubtedly performs several offices. In the first place, it furnishes some of the liquid which is required to dilute the seminal fluid. The intermixture occurs at the time of the orgasm. Then the muscular fibres, are so arranged that during contraction

they press on the follicles and empty them at the time of ejaculation. In this way only could a sufficient quantity of prostatic fluid be obtained. Besides this function, the gland undoubtedly acts as a sphincter muscle to the neck of the bladder.

Every patient with functional or organic disease of the genitals or any suspected constitutional disorder arising therefrom should have a careful and thorough examination of the perineum and a rectal exploration of the prostate gland. When it is enlarged and highly sensitive, the soreness and enlargement may be felt outside by pressing firmly with the finger in the median line an inch above the verge of the anus. Before examining per rectum the patient should be placed in a lithotomy position and a sound carefully introduced into the neck of the bladder; the left index finger is then to be slowly inserted through the anus. In doing this special attention should be paid to the fact that if undue force is used there will be a spasmodic contraction of the sphincter ani which will thus oppose the introduction of the finger and cause intense pain. A useful means of preventing this is to press firmly on the sphincter before the attempted introduction, and finally to rotate the finger as it enters. Just inside the sphincter, the finger, pressed upward, will come in contact with the sound separated only from it by a thin layer of mucous membrane. This is the membranous portion of the urethra. As the finger is carried on it is gradually separated from the sound, that is, the thicker tissue of the prostate intervenes so that it takes some degree of pressure to ascertain the exact position of the sound. The gland can easily be distinguished and the examination will or should furnish evidence of the amount of congestion or inflammation existing, if any, as well as the degree

of enlargement. In cases where excessive masturbation is suspected firm pressure over the whole rectal portion of the gland, on the removal of the sound, will be followed by a considerable discharge of prostatic fluid. In healthy states this will not occur. The question is sometimes asked, what does the normal gland feel like through the rectum of the adult? As a student the question often puzzled me quite as much as it did my interlocutor. Without taking into consideration the measurements of the gland which can be approximately made out, the question can be indirectly answered thus: if there is no feeling of tension in the rectum when the finger is resting on the gland, or of soreness or of special discomfort at that point, the exact dimension of the gland is of little importance. The probabilities are that the gland is normal in size and condition. A feeling of tension over the gland, as if the membrane were tight and distended, and a feeling as if the gland were protruding into the gut shows abnormality in size even when there is no special tenderness. Besides this, pressure on the gland in the sensitive condition mentioned, produces a tendency to evacuate the contents of the bladder.

The passage of hardened fecal matter over a diseased gland, that is a gland diseased from excess or from pollutions, will squeeze out the prostatic fluid and make the unfortunate patient believe that it is a discharge of semen.

#### THE TESTICLES.

The testicles in health are firm to the touch and not sensitive unless the pressure made is excessive. The left one hangs a little lower than the right. In persons who are the victims of evil habits, the organs are generally soft and flabby to the

touch and do not give that sense of firmness so characteristic of the healthy testicle. The testicle, like the brain, has three coverings, a serous, fibrous, and vascular coat. The vascular covering closely invests the lobules of the testicle. The tunica albuginea covers the tunica vasculosa, and sends fibrous diverticula into the interior of the testicle, between which are arranged the lobules of the testicle. The serous covering, or tunica vaginalis, is derived from the peritoneum and forms the most external covering. Beeres gives the number of lobules as 250, but there are probably more. Each lobule is composed of tubes, the *tubuli seminiferi* about sixteen feet in length. Each testicle has about 500 tubes. The epithelial lining of these tubes consists of large corpuscles having many nuclei, and it is in these corpuscles that the spermatozoa are formed. These tubes unite to form larger tubes, which pass out at the back part of the testicles, and passing upward form the *globus major* of the epididymus, the body of the epididymus and the *globus minor*. From the extremity of the *globus minor* the excretory duct of the testicle, the *vas deferens*, is given off. This duct passes upward to the inguinal canal through which it passes, and then dipping into the pelvis by the side of the bladder to its base where it joins with the duct of the *vesiculæ seminales* to form the ejaculatory ducts which (as before stated) pass through the prostate, and open on the floor of the prostatic urethra, at the upper edge of the *sinus pocularis*. The *vas deferens* is two feet in length, forming the principal part of the spermatic cord, and can easily be recognized by the touch because it feels under the finger like a hard cord. It conducts the spermatozoa from the testicles to the *vesiculæ seminales*—receptacles or reservoirs for the seminal fluid. These reservoirs are two irregularly shaped sacs, about two

inches in length, situated at the base of the bladder and resting on the rectum. They form the lateral boundaries of the space at the base of the bladder which is uncovered by peritoneum and which can be touched by the finger as it passes over the posterior edge of the prostate in the rectum. The vesiculæ seminales manufacture a secretion of their own which mixes with the spermatic fluid brought there by the vas deferens. The surplus semen remains in these receptacles or storehouses until it is thrown off in sexual intercourse, in masturbation, or in nocturnal emissions. Because these vesicles after death often contain no spermatozoa, some writers think that the unused semen is absorbed, and that there is no accumulation of it in the vesicles. There is no proof of this absorption. In man the manufacture of seminal fluid is going on constantly. If the patient is in a normal condition, and his genital organs are fulfilling their legitimate functions in a proper way the surplus stock is disposed of naturally. If the patient is sick and the vital forces below par, the secretion must be impaired. When the disease lasts long enough to threaten life, it is reasonable to suppose that the secretion must be very much less, if not altogether lost, so that after death no seminal fluid exists in these storehouses. This I think properly explains the absence of liquid on post mortem examinations.

#### FEMALE ORGANS CONCERNED IN MASTURBATION, ETC.

The mons veneris covers the pubes, and acts as a protector during intercourse, preventing injury from pressure on the sharp edges of the bones. It consists of a thick layer of integument covered with hairs, and supported by a considerable quantity of subcutaneous fat.

The labia majora extend from the mons veneris on either side down to the anterior part of the perineum. They consist of integument, mucous membrane, dense cellular tissue, muscular fibres and large sebaceous glands, and the terminations of the round ligament of the uterus. The labia minora are made up principally of erectile tissue similar in structure to the erectile tissue of the penis, and mucous membrane; they are from an inch and a half to two inches in length. They commence above the clitoris and run down internal to the labia majora and become lost on the sides of the entrance to the vagina; at their commencement above, each labium splits in two layers which surround the clitoris, forming the preputium clitorides, and the frenum of the clitoris (Gray.)

The clitoris consists of two crura of erectile tissue like the corpora cavernosa of the penis, attached behind to the rami of the pubis and ischium, and they terminate in front in a sensitive point analogous to the glans penis. It has also, like the penis, a suspensory ligament, and two small muscles corresponding to the erector penis.

The female urethra extends from the neck of the bladder to the lower portion of the vestibule. The vestibule is a triangular space, bounded on each side by the labia minora, also by the clitoris, and below by the entrance of the vagina. The urethra is an inch and a half in length, and is made up of muscular tissue and mucous membrane and a layer of erectile tissue. It is about an inch below the clitoris. It is more sensitive than the male urethra, and is often employed by masturbators as well as the clitoris for purposes of excitation. Hair pins, lead and slate pencils, leather thongs, sealing wax, and other like substances are passed in and out of the canal, until the necessary degree of excitement is produced. They often slip from the

fingers of the operator into the bladder, where they remain to form nuclei for cystic calculi.

The vagina also contains together with its muscular and mucous layers a layer of erectile tissue rich in nerves. It is highly sensitive and is often employed by masturbators, who introduce foreign bodies, such as candles, stiff rubber tubes, etc., to produce an artificial excitement. It has been stated to me by good authority, that a large income is derived from the sale of a rubber machine, made for the purpose mentioned. They are said to be manufactured in some of the prominent factories in the country, and sold by means of unscrupulous female agents to school girls and others who will not take the risks incurred in ordinary sexual intercourse.

The glands of Bartholin are two in number, and are situated on each side at the entrance to the vagina. The glands open by ducts in front of the hymen ; they secrete a liquid which is analogous to that manufactured by the glands of Cowper. This secretion is poured out in large quantities when there is much sexual excitement, and it serves to lubricate the parts during coitus. During the orgasm there is a discharge from the ducts of these glands analogous to the ejaculation of semen in the male.

The clitoris and the labia minora are supposed to be the seat of the sensation in coitus. When masturbation has been indulged in to any great extent the clitoris generally loses its sensitiveness, though at times it is hypersensitive, and it is elongated and hangs down, often as far as the meatus urinarius. The labia majora and the whole entrance to the vagina is intensely red and congested, and the parts are often bathed in a profuse secretion of mucus. The labia minora are elongated and pulled out beyond the edge of the labia majora. I have

seen cases in the hospital where they resembled the ear of a small spaniel; when the hymen exists, it will be found relaxed, and it does not close as much of the aperture of the vagina as it does in a healthy condition.

## CHAPTER III.

### THE SEMINAL FLUID AND THE MECHANISM OF ERECTION.

Physiological Properties, and composition of Seminal Fluid—Gross Appearances—Spermatozoa—Peculiar movements under the Microscope—Chemical Composition of Semen—Various Quantities formed and Ejaculated—Secretion of Prostate and Cowper's Glands as part of Seminal Fluid—Natural and Morbid Secretions that may be mistaken for Semen—Mucoco-purulent Secretion in Prostatitis, Urethritis and Cystitis—Mixture of Mucus with Epithelial Cells, Chylous Urine, etc.—Distinguishing Characteristics of each—Mechanism of Erection—Nerve Centers Governing Erection—Function of the Cerebellum—Effects of removal of the Organ—Clots and Tumors on the Cerebellum—Emissions produced by Shampooing the occiput—Genito-spinal Center—Sympathetic Nerve Influence—Analogy between the act of Blushing and Erection—Influence of the Mind—Cases of Partial Erection.

The seminal fluid, as stated before, is a product of several distinct glands, differing in chemical composition and physical properties. A large constituent of the fluid is furnished by the prostate and Cowper's glands, the remainder by the testicle and the vesiculæ seminales. The prostatic secretion is opaque, the secretion from Cowper's glands is transparent and viscid. The fluid in the epididymis is slightly opaque. The secretion of the vesiculæ seminales which I have only had an opportunity to examine after death, is sometimes opaque and other times transparent. In two cases where death resulted from Bright's disease of the kidneys, it was transparent and of a jelly-like consistency. In a patient who died of phthisis in Charity Hospital, it resembled seminal fluid, being both viscid and opaque, and containing a few spermatozoa.

Seminal fluid is of a dull white color, alkaline in reaction,

having a strong odor of lime. It is viscid, and rapidly gelatinizes on exposure to air. It contains salts of soda, lime, potassium, and a peculiar protein compound, called by Frerichs binoxide of protein. There is also a phosphorized fat in the body of the spermatozoa.

The procreative factors of the seminal fluid are known as spermatozoa, and they are its principal constituents. They were first discovered by John Ham, who by a variety of experiments proved that they were the fertilizing element in the male. For instance, he found that if the spermatozoa were removed carefully from the seminal fluid by filtration, it lost all power of impregnating the female ovum. It has also been ascertained that they are entirely absent in some animals, except at the time of heat. The spermatozoon resembles a tadpole in appearance, having a large head and a prolongation which resembles the tail. Under the microscope they appear to be possessed of rapid propulsive power, moving rapidly in every direction with an undulatory motion very much like the swimming movements of the tadpole. This power of movement or motion may, under proper conditions, continue for forty-eight hours without being outside of the genital organs. They lose that power when thrown into water. Kolliker states that strong solutions of salt, sugar or albumen, "will restore the motion which has been lost by the action of water." The active movements of the spermatozoa will continue in the vagina for a period of eight days (Stricker.) In connection with the spermatozoa, there are also found seminal granules, measuring  $\frac{1}{100}$ th of an inch in diameter. Nothing is known concerning them, but it is probable that they are undeveloped spermatozoa.

Spermatozoa may be considered as embryonic cells, from which all cells or all tissues are derived. The conditions necessary

for their development are that the spermatozoa should become located in the ovule of the female, and receive there the sustenance necessary for the developmental changes.

In this connection the following table from Acton will be of interest as showing the result of various examinations of the vesiculæ :

Age.	Condition of Vesiculæ Seminales.	Condition of Vasa Diferentia.	Examined hours after death.
20	Slightly viscid ; brown tint	Starchy	11
20	Starchy, and gelatinous	Few animalcules; not brown	4
27	Partly thick and partly thin secretion	—	10
27	Few spermatozoa, but globules	Healthy, with few spermatic animalcules	32
27	Gelatinous; well-formed animalcules	No distinct animalcules, globules	12
29	Gelatinous, thick, globules	No fluid in	3
30	Similar to that in vasa def.	Numerous animalcules in active motion	6 and 48
31	Fluid thick at fundus, in the interior, fluid	Globules and fragments	27
32	Fluid opaque, purulent	Cream or purulent appearance	16
30	Mucilaginous; animalcules numerous	Cream-like globules	22
32	Purulent ; animalcules abundant	Few animalcules	32
33	Small in quantity, brown, opaque	Dilute, purulent — animalcules few	15
33	Small in quantity ; no animalcules	Small particles ; large globules	26
33	Globules ; no animalcules	Minute globules ; no animalcules	6 and 36
39	Showed no animalcules ; no globules	Purely purulent, with globules ; no animalcules	2
39	Gelatinous ; no animalcules or globules	Of a cream or purulent color ; no animalcules	6
41	Mucilaginous ; many animalcules	Particles, but no animalcules	58 and 68
42	Slightly opaque ; abundant animalcules	A few animalcules	37
49	Animalcules abundant, dead in seventeen hours	Abundant animalcules, lively ten hours	10 and 17
57	Abundant vestiges of animalcules ; few distinct	Purulent ; animalcules abundant dead	5

"From the above table it appears that the spermatozoa, or spermatic animalcules were found equally in the vesiculæ seminales and in the vasa. It is curious to remark that, in all the cases in which spermatozoa were found in the vasa deferentia, similar animalcules were noticed in the vesiculæ seminales. In cases in which the body was examined a few hours after death the spermatozoa were found alive, and moving actively, while in a few hours later they were motionless and dead, and warmth had no effect in re-animating them. In some cases the animalcules were not perfect, portions only of imperfect spermatozoa being found. In other cases no animalcules could be discovered either in the vasa deferentia or vesiculæ; they were replaced by large or minute globules, small particles, or fragments. The age of the individual appeared to have little to do with this condition of the spermatozoa, or, indeed, with their presence, numbers, or total absence. It is curious further to remark that, although spermatozoa were found frequently in the vesiculæ and vasa deferentia, they were only found twice in the testes. The fluid expressed from the testes was transparent, generally contained globules nearly equal in diameter to the blood corpuscles, and invariably contained dense particles, apparently spherical, from ten to fifteen times smaller. Dr. Davy thinks, first, that chronic wasting diseases terminating in death arrest the secretion of the testes, or the production of those animalcules on which there is much reason to believe the active powers of the semen depend. Secondly, that the contents of the vesiculæ and vasa deferentia, under the influence of disease, retain their characteristic qualities longer than the contents of the tubuli; and, thirdly, that there is least fluid in the vesiculæ and in the vasa deferentia, and that it is most altered in instances of chronic diseases of the abdominal viscera, and especially

of the intestines."—*Edinburgh Med. and Surg. Jour.*, vol. 1. p. 14.

The seminal fluid when not removed by intercourse, accumulates in the vesiculæ seminales, and is thrown off at night under the influence of lascivious dreams. Every man in a healthy condition is subject to these emissions at periodic intervals. The length of time between these emissions depends on peculiarities of temperament, habits and conditions of life. As a general rule it may be stated that seminal ejaculations occur once at least in two or three weeks. Still it is not indicative of an unhealthy condition when emissions occur once a week. Oftener than this, however, is generally a sign of undue irritability and relaxation of the genital organs, the result of sexual excess or masturbation.

Emissions are not peculiar to men. Women also have them at night, and accompanied by the same sensations and lascivious dreams which characterize their occurrence in the opposite sex. The secretion poured out is formed in the glands of Bartholin, and is used for lubricating purposes, but under the influence of unsatisfied desires and morbid mental excitement, it is manufactured in excessive quantities, and ejected, distending the duct as it passes out, thus probably assisting in the production of the orgasm. Except in coition, healthy women are never subject to these discharges. They do not, however, occur invariably from venereal excesses; for any chronic congestion of the uterus, ovaries, or vagina, or of the glands of Bartholin, may produce frequent nocturnal emissions in the female.

The quantity of seminal fluid thrown off depends on the previous habits of the individual. If he is plethoric, and at the same time continent, the quantity is large. If intercourse is freely indulged in the amount is comparatively small. The

quantity in each emission varies from a drachm to half an ounce. When there is congestion of the prostate, or inflammation of the prostate, chronic in character, or much irritability of the genital organs the amount of seminal fluid ejected is increased, its viscosity lessens and it often assumes a slightly yellowish tinge. The secretions which may be mistaken for spermatic fluid are in order of frequency :

Secretion of Cowper's glands.

Prostatic secretion.

Muco-purulent secretion of Prostatitis.

Muco-purulent exudation of Urethritis.

Muco-purulent exudation of Cystitis.

Mucus mixed with epithelial cells.

Chylous urine.

All of these discharges are sources of anxiety to timid and nervous patients. A person who has at any period of his past life misused his genital organs, is exceedingly apt to regard every unusual secretion as unmistakable evidence of seminal losses, and weakness of the genital organs. If the patient is unfortunately led to consult an advertising practitioner, he will probably have his fears confirmed. He is told that the discharge is seminal fluid, and that the involuntary loss is a positive sign of approaching impotence. Indeed it is not an unusual thing for these imposters to exhibit under the microscope specimens of seminal fluid, and claim that it is a portion of the fluid left by the patient for examination. In this way they work on the morbid sensibilities of their patients, and reap rich harvests as the result of their detestable deceit.

The history of each case is generally sufficient for a diagnosis, but if the history is not clear, a microscopical examination of the suspected secretion will determine its character by the presence

or absence of spermatozoa. Spermatozoa are rarely seen in any fluid but the seminal fluid. Occasionally, a few spermatozoa may be seen in the urine after an emission, but they are rarely if ever found in the secretions previously mentioned.

The secretion of Cowper's glands is transparent and viscid, like the white of an uncooked egg. It resembles pure mucus. Where intense sexual excitement exists or where there is much relaxation of the genital organs, the secretion is poured out in large quantities. In a healthy state of the organs, a small quantity only is used for purposes of lubrication. The glands probably serve the same purpose in the male that the glands of Bartholin do in the female. The absence of opacity, and of spermatozoa, renders the secretion easy of recognition.

The opaque, muco-purulent secretion which characterizes gleet is often confounded with seminal fluid. Persons who have masturbated are apt to attribute the discharge to their early indiscretion. In the majority of such cases there is a history of preceding gonorrhœa. The exudation usually occurs in the morning, filling up the meatus urinarius. It is yellower than semen, and not so viscid. The peculiar odor of semen is also absent. Under the microscope, it will be seen to consist of pus and epithelial cells. No spermatozoa will be found unless the patient has had an emission the night previous to the examination.

The mucous secretion of the urethral canal sometimes becomes temporarily opaque, from the admixture of epithelial cells. The opacity usually lasts a day or two and then disappears. I have known it to occur during a paroxysm of intermittent fever. The use of sounds for the relief of irritation in various parts of the urethral canal will often occasion it. So also will prolonged coitus under the influence of alcohol. The probabilities are

that it never occurs when the mucous membrane throughout the canal is in a healthy state.

In prostatitis and cystitis, the urine may contain large quantities of mucus and pus. The mixture of these in ammoniacal urine, forms a gelatinous stringy mass which sinks to the bottom of the liquid and adheres to the side of the vessel. In prostatitis and cystitis there is pain on micturition, and a frequent desire to micturate. The opaque exudation of mucus appears with the last parts of the urine. In prostatitis, acute or chronic, the passage of fecal matter from the rectum may force out the secretion into the urethral canal. Patients invariably regard this as semen and are much alarmed. An additional proof of the existence of prostatitis, may be obtained by introducing the finger into the rectum. If the gland is inflamed it will be much larger than usual and will be very painful on pressure. The passage of a sound also produces great pain, in cystitis as well as in prostatitis. Then again the ammoniacal odor of the urine is a guide to us in cystitis, as well as the pain on pressure over the hypogastric region, the passage of a sound, etc. A microscopical examination shows the presence of epithelial and pus cells.

Chylous urine is of rare occurrence, in temperate or northern latitudes. It is more frequent in tropical climates. It arises generally from some disturbance of assimilation by which the chyle passes unchanged into the urinary tract. Chylous urine looks as if mixed with milk. The new ingredient coagulates on cooling, and soon after separates into two portions, viz : fibrin and fat. If allowed to stand for a short time the fat collects on the surface of the liquid. Under the microscope fat globules are seen in large amount but no spermatozoa.

## MECHANISM OF ERECTION.

In order to treat a case of spermatorrhœa or impotence successfully, we must understand all the varied elements that are concerned in producing the normal as well as the abnormal erection of the penis. Specially must we examine the nerve centers which are supposed to govern the genital or procreative function. Very little, it is true, is known about them, but that little may guide the conscientious student in the right direction toward further development and new discovery. Gall, the celebrated phrenologist, located the governing power of the sexual instincts in the cerebellum or "little brain." Removal of the organ sometimes produces atrophy of the testicles in the male and of the ovaries in the female. When it is removed from the rooster, and the bird is placed with his family of hens, he will attempt to perform his functions as usual, but in vain. He is unable to co-ordinate his muscular movements for the act, though there is every evidence of desire being still present. This experiment shows only that the cerebellum has a governing power over the co-ordination of our muscles. Tumors of the cerebellum, and clots of blood in the same organ, have produced satyriasis in the male and nymphomania in the female. A patient under my treatment had an emission whenever the barber shampooed his occiput. Other cases of a similar nature are recorded, but they prove nothing absolutely, because the barber's brush at the occiput covers other nervous structures, such as the medulla and the upper cervical nerves. Besides all these cases occurred in persons who had masturbated extensively, thus rendering the nerves exceedingly sensitive, and any pleasureable irritation applied to other parts of the nervous system might have produced a like result.

In Kirke's handbook of physiology, M. Flourens says : " There is no proportion between the size of the cerebellum and the development of the sexual passions. On the contrary, many instances may be mentioned in which a larger sexual appetite co-exists with a smaller cerebellum, *e.g.*, rays and eels, which are among the fish that copulate, have no lamina on their almost rudimental cerebellum, and codfish, which do not copulate, but deposit their generative fluids in the water, have comparatively well developed cerebellums. Among amphibia, the sexual passion is apparently very strong in frogs and toads, yet the cerebellum is only a narrow bar of nervous substance. Among birds there is no enlargement of the cerebellum in the males that are polygamous ; the domestic cock's cerebellum is not larger than the hen's, though his sexual passion must be estimated at many times greater than that of the horse. Among mammalia the same rule holds good, and in this class the experiments of M. Sasseigne have plainly shown that the abolition of the sexual passion by the removal of the testicles early in life is not followed by any diminution of the cerebellum, for in mares and stallions the average absolute weight of the cerebellum is 61 grains, and in geldings 71 grains, and its proportionate weight compared with that of the cerebrum is on an average as 1 : 5-57 in mares ; as 1 : 5-97 in geldings, and only as 1 : 7-07 in stallions. On the whole therefore it appears advisable to wait for more evidence before concluding that there is any peculiar and direct connection between the cerebellum and the sexual instinct or sexual passion."

There is another portion of the nervous system which also has some direct influence over the genital apparatus. It is located in the spinal cord, in the dorso-lumbar region. Various kinds of irritants applied at this point affect the genital organs

in both sexes. An electrical current sent through will cause contraction of the bladder, retraction of the testicles, and sometimes erection of the penis. In the female it excites contractions of the uterus, vagina, and bladder. If the dorsal nerves of the penis are cut erections will not be maintained until the cut ends are again joined. This operation is sometimes performed in order to render stallions impotent.

Under healthy conditions every ejaculation of seminal fluid is accompanied by an expansion of the erectile tissue of the penis, and by a pleasureable sensation, known as the orgasm. Some think that the peculiar sensation arises from a distension of the veru montanum, a raised ridge of mucous membrane in the prostatic urethra, which has been previously described. This body is highly sensitive, and when distended prevents the regurgitation of seminal fluid into the bladder. It is very probable that the distension of the ejaculatory ducts when the semen is passing, may influence the orgasm quite as much as the distension of the veru montanum. The erectile tissue, like every other vascular tissue in the body, is under the direct control of the sympathetic nervous system, a control which is entirely independent of the will, and influenced solely by the emotional nature. An excellent illustration of this is seen in the simple act of blushing. An emotion of a certain kind acting through the sympathetic nerves will cause the capillary bloodvessels of the cheek to dilate. They become distended with blood, and cause the warmth and reddening, which is called a blush. An emotion of a contrary nature will cause contraction of these bloodvessels, and a resultant paleness.

In like manner, uninfluenced by the will, certain emotions which it is not necessary to enumerate, will produce a dilatation in the bloodvessels of the penis, and expansion of the erectile

tissue, and an active determination of blood to the corpora cavernosa and corpus spongiosum, which causes a physiological erection. The permanency of the erection depends first on the increased afflux of blood to the parts ; second, upon tonic contractions of muscles connected with the penis, and third, a certain amount of obstruction to the return circulation from the organ. The muscular fibres of the accelerator urinæ take an active part in this partial and physiological obstruction. Its middle fibres compress the erectile tissue of the bulb of the corpus spongiosum, and the anterior fibres compress the dorsal vein of the penis during erection. The fibres of the erector penis compress the corpora cavernosa during the contraction. In this connection we must not lose sight of the fact that the involuntary muscular fibres of the erectile tissue of the penis take an active part in the erection of the organ, and lack of tonicity in these muscular fibres, as well as in the voluntary muscular fibres, is one of the principal causes in impotence.

Many physiologists deny that there is any obstruction to the return circulation ; that such obstruction is not necessary to the permanency of the erection. They say further that the erection is maintained simply by an increased supply of blood to the organ, and consequent distension of the erectile tissue. It is an undisputed fact, that the muscles mentioned are contracted during erection, and that irregular spasmodic contraction of these muscles will interfere with the erection, that is, diminish its power. From their situation and attachments it is impossible for them to contract without compressing the veins bringing blood from the penis, as well as the erectile tissue of the corpora cavernosa and corpus spongiosum. Without this interference with the current of blood coming from the organ the blood would be forced out of it during intromission.

The erectile power is often lost in enervated individuals by the relaxation of these muscles, or by their spasmodic action. Indeed I regard this lack of contraction as entering largely into the causation of impotence. In this connection, it will perhaps be well to examine the views of other authorities on the subject. Kobelt says : "Thus on the one hand the glans penis, endowed as it is with sensibility, and on the other hand the irritable muscular apparatus of the bulb, act and react upon one another as reciprocal exciting causes. The glans penis when excited reacts on the bulb, which sends more and more blood, the exciting material, towards it. Each new rush of blood to the glans penis exalts its sensibility, the bulbo-cavernous muscle, irritated in its turn, progressively accelerates its contractions, in order to satisfy the requirements of the glans, which also increases more and more till at last, by alternate actions, the entire apparatus reaches its highest point of excitement. At this moment a new series of secondary reflex phenomena are suddenly produced between the glans penis and the muscles which produce evacuation of the vesiculæ seminales, these muscles become excited, a spermatic ejaculation is produced, and at this point the currents exchange, the special function is accomplished and the organ, as soon as nature has gained her end, returns to its ordinary state of repose and negative life."

"Erection is caused by a relaxation of the muscular elements in the trabeculæ of the cavernous and spongy bodies, and of the tunica media of the arteries of these parts, in consequence of which the tissue, like a sponge which has been compressed, expands and becomes filled with blood. The rigidity ensues so soon as the muscles are completely relaxed, and the sinuses filled to the utmost, without there being any necessity that the

return of blood should be impeded and the circulation stopped. It ceases when the muscles again contract, the venous spaces become narrowed, and the blood is expressed from them." Rouget says: "The distention of the vesiculæ seminales is the first cause of natural erection. The latter commences by a species of spasm, which develops itself in the muscular apparatus of the generative system, is transmitted *de proche en proche* to the bundles of the root of the cavernous body and the bulb, and tends to propagate itself to the whole extent of the penis. The obstacle to the course of blood in the veins of the plexus of Santorini, imposed by the first muscular contraction, has for its immediate effect the dilatation of the areola of the cavernous bodies by the blood, and the tension of the liquid by the blood struggles energetically against the muscular tonicity up to the moment when ejaculation being accomplished, spasm ceases little by little in the same situations where it began; the circulation then becoming free, muscular contraction gets the better of the tension of the blood, and partially drives on the liquid. The organ then itself gradually resumes its natural dimensions."

In this connection, the following peculiar case of partial erection is of interest: Two years ago I was consulted by a gentleman who had been a sufferer from chronic gonorrhœa and stricture for a long period. He said that for five years his erections had not been complete, as only the upper part of the organ partook in the distension. The corpus spongiosum seemed to take no part whatever in the erection, and the organ when erect was flat. He said his penis seemed flat whenever erect. There was no lack of strength in the patient. His emissions were not too frequent, and in other respects seemed to be natural. The only thing that troubled him was the pe-

culiar shape of the penis, when expanded. I saw him again six months ago, but there had been no change in the character of the erections and he had no difficulty in sexual intercourse, or any lack of pleasure therein.

## CHAPTER IV.

### SPERMATORRHœA AND IMPOTENCE.

What Constitutes Spermatorrhœa—Opinions of Hippocrates, Celsus, Lallemand, Acton, Van Buren, Hamilton, Bartholow, McGraw, Gross, Post, Hutchinson, and others—Various causes of Spermatorrhœa and Impotence—Masturbation, Sexual Excesses, Mental Emotions, Continence, Diseases of nerve centers, diseases of Testicle and Penis, Congenital and acquired Malformations—Relative Indulgence in the Vice of Masturbation by Inhabitants of Savage and Civilized Countries—Masturbation among Animals—Age at which Onanism is usually begun—Nurses as Teachers of Immorality—Dangers of Intimate Companionship—Influence of certain Gymnastic Exercises in Developing Masturbation—Varieties of Exercises that should be Prohibited—Cases in which Swinging from Poles and Bars should be Prohibited—Morbid changes in the Genital Organs caused by Self-Pollution—Constitutional changes from the same cause—Why Seminal Emissions continue when Masturbation is discontinued.

Spermatorrhœa, or Spermatozemia, is a disease characterized by involuntary discharges of seminal fluid. The name in its strictest application is confined to those rare cases in which ejaculations of semen occur without desire, sensation or excitement. Modern usage, however, has made the term applicable to all cases of involuntary seminal discharges, which occur with such frequency as to produce a perceptible deviation from a healthy state.

Impotence, or loss of power to copulate, is usually an accompaniment of spermatorrhœa. They rarely occur separately. Exciting and predisposing causes of the one are exciting and predisposing causes of the other. The etiology and treatment of both are the same. Their consideration, therefore, under the same general head, will be more advantageous to the reader,

than if a symptom, such as impotence really is, were studied in another chapter.

Spermatorrhœa has been recognized from the earliest antiquity. The oldest writers gave it ample space and consideration. Every manifestation of the affection has been studied for nearly two thousand years, yet there is still a wide difference of opinion as to what constitutes a true case of spermatorrhœa. This is well illustrated by the following extracts from published works and correspondence. Hippocrates called the disease *Tabes Dorsalis*. He says "it proceeds from the spinal cord, and is frequently met with among newly married people and libertines. There is no fever, the appetite is preserved, but the body falls away. If you interrogate the patients, they will tell you that they feel as if ants were crawling down the spine. In making water or going to stool they pass much semen. If they have connection the congress is fruitless; they lose semen in bed, whether they are troubled with lascivious dreams or not. They lose on horseback or in walking. Their breathing becomes difficult: they fall into a state of feebleness, and suffer from a weight in the head and a singing in the ears. If in this condition, they become affected with a strong fever, and die with cold extremities." Celsus, evidently referring to spermatorrhœa, says :

"There is also a disease of the genital organ, an excessive discharge of semen, which is rendered without a sexual intercourse or nocturnal illusions, to such an excess that in time a man may be carried off by consumption."

Arætius, says "The semen flows away, nor is it capable of being suppressed even during sleep, whether the man be asleep or awake the discharge is kept up, nor is there any cessation of it."

Galen thought that constant and involuntary discharges of semen constituted gonorrhœa. In fact that was the opinion held by many of the ancient writers, and the term gonorrhœa means a flow of semen. Moschon says that "gonorrhœa is an emission of semen without desire." Rufus of Ephesus was of the opinion that "nocturnal emissions, pollutions, disordered men more than coitus, because when pollution happens to a man oppressed with sleep, and his powers asleep, it more oppresses and more affects the man." Sartorius thought that spermatorrhœa disposed to calculus, diminished the natural heat, and brought on weakening and loss of sight.

Coming down to later times, we find Ambrose Paré speaking of an involuntary flow of semen running from all parts of the body to the genital organs, caused by the resolution and paralysis of the retentive faculty of these parts, and from too great an abundance of blood and seminal matter within the body. It is probable that he referred to gonorrhœa and not to spermatorrhœa.

Lallemand says, "I shall express by the term spermatorrhœa, every excessive spasmotic ejaculation from whatever cause it may arise."

In Acton's valuable treatise on the reproductive organs we find the following :

"Great exaggeration has doubtless been indulged in by many of those who have described the complaint, and this from obvious and infamous motives, but I am convinced that many of the most obstinate complaints which the medical man meets with, arise from the repeated loss of semen. The condition or ailment which we have characterized as spermatorrhœa then, as we shall use the word, is a state of enervation produced at least permanently, by the loss of semen."

Gross says "a loss of semen is one of the natural consequences of manhood, it is a necessity of the system, and is therefore to be regarded as a disease only when it occurs too frequently, or when it is produced by improper means." From this statement it is to be inferred that any seminal losses which affect the general health, come under the head of spermatorrhœa.

Van Buren and Keyes, in their work on genito-urinary surgery, say "that spermatorrhœa is an escape of seminal fluid containing spermatozoa, is an escape without ejaculation, and without pleasurable sensation or orgasm, usually at stool, with the urine, or to a slight extent at all times during prolonged erection under extreme sexual excitement. A small amount of the seminal fluid is apt to escape into the prostatic sinus, and to be passed at the next erection or urination."

R. Bartholow thinks the term spermatorrhœa should be restricted to that condition in which involuntary losses occur with sufficient frequency to produce a well defined morbid state.

Hamilton McGraw, of Detroit, says: "I do not believe that even a daily emission of semen will do serious damage to a healthy vigorous man." I fear that few physicians of experience will be found to agree with this view.

Dr. Vandevere thinks that three out of every ten cases of so called spermatorrhœa are imagination.

The vast majority of authorities however agree in the opinion that spermatorrhœa and impotence are active factors in a development of mental and physical derangements and in the transmission of constitutional weakness from father to child. The general recognition of this fact has not yet been productive of a systematic plan of treat-

ment. Vagueness, uncertainty, and contradiction, abound in nearly every system of medication recommended. Hence, the field is almost monopolized by quacks, who reap rich harvests in the management of the disease.

The causes of spermatorrhœa and impotence, in the order of frequency, are :—

- Masturbation.
- Sexual excess.
- Mental emotion.
- Diseases of nerve centers.
- Continence.
- Diseases of testicle and penis.
- Congenital and acquired malformation.
- Diseases of the rectum and urethra.
- Drugs.

#### MASTURBATION.

Masturbation is a universal vice in civilized countries. A very large majority of human beings of both sexes indulge in the habit from early childhood.

In savage lands it is of rare occurrence. Savages live in a state of nature. No moral obligations exist which compel them to abstain from a natural gratification of their passions. There is no social law which prevents them from following the dictates of their lower nature. Hence they have no reason for adopting onanism as an outlet for passions.

The moral trammels of civilized society and ignorance of physiological laws give origin to the vice. The dread of the consequences of sexual intercourse begets continuous indulgence in the other sin because it is less liable to be found out. But masturbation is not confined to human bipeds. The lower

order of creation sometimes display lascivious proclivities in that direction. Dogs, cats, monkeys, and rats have been known to masturbate. Such cases must be exceedingly rare, because the opportunities for sexual congress among animals are unlimited. Indeed, it is more than probable that the creatures so indulging must have been taught the habit by some depraved beings of the human species.

Children commence the habit at a very early age. Cases are on record of babes at the breast masturbating. A strong element of doubt necessarily surrounds such records. They must be taken *cum grano salis*, though the observer may have been honest in his belief. It is possible to mistake the ordinary spasmodic movements of a delicate child, laboring under undue excitement, from worms, or a scrofulous vulvitis, for well directed efforts at masturbation. It is an authenticated fact, however, that children at the breast are often excited by their nurses, in order to keep them quiet. The titillation of the child's genitals produces sensations of pleasure which allay its cries. Thus the seeds of a loathsome disease are often sown. With maturer years, the recollection of past experience awakens in their young breasts an exaggerated venereal sense, and prolonged onanism results as a natural consequence. Often, indeed, the cessation of excitation at the hands of the nurse marks the commencement of personal pollution. Children have been known to begin the habit at the early age of five. Though there are no spermatozoa formed at that period of life—not, indeed, before puberty—emissions and erections are produced by the friction. The fluid which forms the emission is probably the production of the prostate and Cowper's glands.

From eight to sixteen may be called the masturbating period. At sixteen or eighteen they are apt to be frightened from the

practice by reading, or hearing from friends, of the mental and physical decay which threatens to overtake them.

At least ninety per cent. of the persons addicted to the vice owe their misfortune to the instructions obtained from domestics or from older and more vicious playmates. Or they are taught by erotic nurses in whose care they are placed by confiding parents. A gentleman of my acquaintance, who for years suffered from the consequences of onanism, informed me that his first experience occurred between five and six years of age. The nurse, who slept in his room, carried him one night to her own bed, and gave him his first lesson in the art, a lesson which cost him years of feeble health, anxiety and pain. His case is only one in thousands. It shows that the character and habits of the nurse and domestic have often more to do with the future welfare of the child than the character and habits of the parents. All nurses, good, bad, and indifferent, need watching. And in order to determine whether the children have been tampered with or not by the nurses, a critical examination of the genitals should be made from time to time. Friction of the genitals soon manifests itself by looseness of the integumentary covering of the penis in the male and of the labia in the female. In females the redness is the principal effect noticed, though a large amount of the normal mucous secretion is generally also present. In aggravated cases the secretion may be muco-purulent. It must, however, be borne in mind, that in scrofulous children there is often present a leucorrhœa entirely independent of masturbation, but the consequent irritation of which often gives rise to the habit.

It has been suggested that a rigorous law on the statute book, with a fitting penalty attached, would deter, if it did not completely stop, depraved nurses from transferring their lewdness

to the innocent minds of the children under their charge. A few examples of punishment might be of benefit to the rising generation.

As a rule it is wrong to allow children to sleep in the same room with their nurses, or in the same bed with other children. Nor should they be allowed to frequent lonely places or be away from the observing eye of a watchful tutor or friend. The natural curiosity of children, combined with the animal instinct for sexual pleasures, leads them to an examination and finally to a titillation of their genital organs, often without the aid of any vicious instruction.

There are certain gymnastic exercises provocative of masturbation. These exercises are common in all gymnasiums, and in many school grounds. My attention was first called to this subject by the history which a confirmed masturbator gave me of his first experiences. He entered school at the age of seven. The day after his admission he visited the school gymnasium. His attention was attracted to the swinging pole around which a number of boys were enjoying themselves. He took hold with the rest, sustaining the whole weight of the body by the hands, swinging himself around the circle for some time. In a few minutes he had such peculiar sensations about the genitals that he was forced to discontinue the movement and rest. Again and again he swung himself around until he experienced the same effect, the sensations becoming more positive and intense. The next day, on trying the same experiment, the tingling sensations terminated in an orgasm. This led him to a closer examination of his organs, and also to new methods of increasing the same excitement, until finally he became a confirmed masturbator.

Another, a patient now under treatment, said that the first

time he ever felt pleasurable sensations in his genitals, was while he was engaged in sliding down the mast of a whale boat. The first repetition of the exercise produced an orgasm, and from that grew the habit for which he was under treatment. A somewhat similar history has been given me by others, one a female, who learned the art by sliding down the stair-bannisters. Lallemand relates the case of a boy who commenced masturbating by straddling down transverse bars, and another who excited himself while hanging by the arm and thus sustaining the whole weight of the body. So numerous are such cases, related by experienced men, that there can be no doubt of the injurious results of such exercises, nor of the salutary effects which would arise from their prohibition. Gymnastic exercise, such as climbing, sliding down poles, clinging to rings, bars and ropes, swinging by the hands, in fact every exercise in which the whole weight of the body is sustained by the hands, should be excluded from school gymnasiums. Boys under eighteen should not be allowed to indulge in any gymnastic exercise tending to produce a determination of blood to the genital organs. After that age there is less likelihood of producing evil from these peculiar gymnastics. There are many occupations which, after puberty, are apt to produce the habit of masturbation. Boys and young men who are confined all day in stores and factories, who use tobacco or alcohol, and take little or no exercise out doors, are liable to become victims. Erotic tendencies and inordinate irritability of the genital organs are fostered by confinement and sedentary habits. Boys out of doors, breathing pure air, in active employment, rarely indulge in the vice or continue it to their injury. Onanism, developed after puberty in persons of sedentary habits, is more pernicious in its effect

than when it is commenced in early childhood. The repeated nervous shocks which it occasions are stronger, and make a deeper impression on the system. The individual becomes more wedded to the vice, and is more likely to persist in his transgression than those younger patients who, with the first dawn of manhood, have been warned of the evil consequences of the habit which they commenced, before their reasoning faculties controlled them.

Masturbation, though injurious to both sexes, is less so to females than males. The worst features of the vice are always more apparent in the latter from an equal amount of indulgence. Girls hide most of the ravages of the vice under "general nervous excitement;" boys have not this convenient refuge. It is generally supposed that every masturbator carries his sign out, and that the face is a never failing tell-tale. Such is not invariably the case. The majority of masturbators show no more signs of the secret vice than married men do of free sexual intercourse. It is a great mistake not to make a diagnosis because the often detailed signs are not perceptible in every feature. There is always difficulty in getting at the truth from patients when the external signs and manifestations are not prominent, because positive denials of the practice are almost always made. And it is a good rule to disbelieve these denials, unless a local examination confirm their statements. It is only when the sin has been a besetting one for a long period of years, and when it has destroyed many of the finer instincts of manhood, that you notice the characteristic pale expressionless face, with sunken eyes, that seldom meet yours, but steal sidelong glances, when your attention is drawn in another direction. Only in such chance chronic cases do we find the patients cowardly, easily startled, sleepless, inani-

mate, forgetful, stupid, troubled with vertigo and epilepsy, mere animals in everything,—in desire, as well as in action. We rarely meet with such cases, because the years of discretion bring an appreciation of the danger, that either diminishes or permanently stops indulgence in the vice. As before stated, this change is likely to occur about the age of eighteen, at which time too the local effects are plainly evident to the personal observation of the patient himself, and these too add to the fears and assist the attempts at reformation which generally are successful, unless indeed he is completely controlled by ungovernable and beastly sensuality. Though the effects of years of masturbation may not stamp itself indelibly on the features, or remarkably impair the general health, at least so far as the uneducated can discover, yet there are characteristic marks on the genitals which cannot be mistaken. The local lesions are sufficient for a diagnosis, even where no correct history of the case is obtainable.

#### LOCAL EFFECTS OF MASTURBATION.

The penis is thinner and smaller than usual. It is often elongated, and cold to the touch at different points. The glans is much larger than the rest of the organ; this enlargement of the glans is due to the frequent handling, to the relaxed condition of vascular spaces in the erectile tissue, and the gravitation of blood to the most dependent portion of the organ. The veins of the integumental covering are dilated and varicose. In many patients the penis is bent laterally, and the inclination is generally toward the left side; this condition is probably due to partial paralysis of the muscular fibres of the opposite side. I have sometimes in such cases found the opposite or convex side deficient in sensibility. Nearly all persons suffering from

the effects of masturbation or excessive sexual congress, present this peculiar change in the shape of the organ. The deformity is more apparent in those who commence the habit before puberty.

The scrotum is also relaxed and elongated. The testicles are small and soft, and the left one hangs much lower than it does in health ; sometimes they are extremely sensitive, and very slight pressure gives rise to pain. The sensitive testicle may atrophy, and it is generally smaller than the other. An enlarged and varicose condition of the veins of the spermatic cord is present in many cases.

The mucous membrane of the urethra is injected throughout, but the greatest amount of congestion is to be found in the prostatic portion of the urethra. The morbid changes are here very well marked. The mucous membrane lining this portion of the canal is *intensely* congested and swollen, but in the lower part the changes are more extensive. The lining membrane is thickened by the formation of new connective tissue, and infiltration of cells ; it is of a dark red color, and has lost much of its epithelium. The *veru montanum*, whose distension during coitus causes the orgasm and prevents the semen from going backwards into the bladder—is increased to twice its ordinary size. Indeed it is often so large as to afford an obstacle to the passage of the sound. Its sensitiveness is usually increased. In very bad cases where there is absolute paralysis, sensation in it may be entirely absent—but as a rule it is exaggerated. Patients complain constantly of an itching or tingling sensation in the part which seems to them like a commencing orgasm, and that sensation may be increased by very little excitement, so as to terminate in an orgasm. The mucous lining of the prostatic urethra, and of that portion of the mem-

brane of the bulb near where the ducts of Cowper's glands empty, presents very much the same appearance as granular lids do in long standing cases. The orifices of the prostatic ducts, which line each side of the veru montanum, are much larger than usual, are darker colored than the rest of the mucous membrane, and, like the other parts, divested of epithelium. Their mouths may contain a quantity of muco-purulent exudation. Sometimes there is ulceration at the orifices of these ducts. The mouths of the ejaculatory ducts which open near the edge of the sinus pocularis, present similar changes. With regard to this fact Lallemant says :

“The ejaculatory ducts generally share the alteration and dilatation of their orifices, besides which, they may be insulated as though distended, by the suppuration of the prostate, or thickened, hardened and cartilaginous, or they may even contain osseous granules. These alterations, much more serious than those of the orifices, must dispose very much to the involuntary escape of semen, the ducts, having lost their elasticity and even their power of contraction, are no longer able to drive back the semen into the seminal vesicles ; or at least they are incapable of retaining it, however gently these reservoirs may contract or however little they be compressed ; the pressure exerted on these ducts by the swelled tissue of the prostate may cause their atrophy or obliteration, whence, of course, ensue the more or less complete loss of their functions.

“The vesiculæ seminales may be dilated and thickened ; they may lose their characteristic irregular, uneven surface, and become firmly adherent to the surrounding structures. Their lining membrane may be covered with lymph or granular fungoid vegetations. They may be filled with pus or tuberculous matter. I have almost always found in the vesiculæ seminales,

particularly at the bottom of the depressions, a thick granular shining liquid, variable in aspect, color and consistence, but resembling pretty thick glue, and more or less transparent. Under a power strong enough to observe the spermatozoa, the particles (*grumeaux*) of this secretion appear somewhat irregular in size, more or less opaque, and of a uniform shape. These are evidently the products of the internal membrane of the vesiculæ seminales; for they are found with analogous characters in the accessory vesiculæ of the rat, etc., which never contain animalcules, and do not directly communicate with the vas deferens. These canals never contain similar bodies in any species. This secretion, then, is analogous to that produced by the prostatic follicles, Cowper's glands, etc. Its use is the same and it deserves for many reasons our special attention."

The prostate gland is enlarged and tender on pressure. This enlargement may remain when other vestiges of the diseased action have altogether disappeared. Pressure on the gland through the rectum, may or may not be painful, but is usually followed by the appearance of an opaque fluid at the orifice of the urethra, either immediately following the pressure or at the next act of urination. It is composed of prostatic secretion, pus and epithelial cells. The passage of a sound over these parts occasions considerable pain. When drawn out it may be followed by the same opaque discharge as that produced by pressure on the prostate, or by a discharge of clear viscid mucus. Patients in this condition micturate very frequently and the act is rarely accomplished without some sense of discomfort at the neck of the bladder or rather at the prostatic portion of the urethra, when the passage of the urine irritates the sensitive and abraded mucous membrane.

The local changes in the female genital organs always demon-

strate plainly enough the results of masturbation, even when the patient denies the habit. The labia minora are elongated. In some cases the pulling to which they have been subjected increases their size to an enormous extent. I have known them to measure two inches and a half in breadth and to look very much like the ears of a spaniel. They are dark colored at the edges, and sometimes are like parchment to the touch. At the base they are red and swollen. The clitoris is also elongated and thicker than in health. In some cases it loses its ordinary sensitiveness, at others (and these are in persons who are comparatively new to the habit) there is a remarkable increase in the sensitiveness. Near the entrance to the vagina there is intense redness, and in spots excoriation, and these parts are sometimes bathed in a muco-purulent secretion. The ducts of Bartholin's glands which open in front of the hymen are much enlarged. A digital examination is certain to increase the normal secretions, and produce turgescence of the clitoris and nymphæ.

#### CONSTITUTIONAL CHANGES.

As before remarked it is not often that the patient shows unmistakable signs of onanism in the features. It is only in cases where the habit has been long practiced, and where the natural manhood or womanhood of the individual has been subverted by lasciviousness, that we notice marked changes there. In other things the effects are plain enough to the experienced eye. The superficial veins of the integument covering the hands and feet on the dorsal aspect, are very much enlarged or dilated. This is a normal condition in some thin skinned people, advanced in years, but when noticed in young persons it is connected with sexual excesses, or masturbation. The

hands are often moist and clammy. While the patient is sitting, his shoulders stoop, and both hands are generally placed on the inside of the thighs. The muscles are flabby; the face is usually pale and sallow. Under the eyes there are heavy dark circles. In women, this is a normal condition when pregnancy exists and also in persons who have indulged in intercourse to excess. In uterine diseases it is likewise present. In severe cases the eyes lose their firm expression and are lusterless, and they rarely meet the gaze of friend or physician. Emaciation is often present. The gait is "draggy," as if a weight were attached to the heels. Acne is frequently present on the face, giving it a disgusting appearance. It is found generally in patients with a dark complexion. But it must be remembered that the eruption often occurs independently of lascivious indulgence.

The alimentary canal suffers like the rest of the body. The tongue is coated; constipation is almost always present, due to lack of tone in the muscular coat of the bowels and deficient secretion. Acid eructations and a feeling of weight in the stomach after eating appear with the constipation. In short, all the symptoms of indigestion or dyspepsia may be present. Vertigo is a common and a very troublesome symptom to deal with. It is often accompanied with headache. Sleeplessness, with nervous twitching of the muscles, especially those of the extremities, and palpitation of the heart are common accompaniments of sexual as well as of solitary indulgence. There is general lassitude and an inability to apply the mind to continuous work. Memory is deficient, and there is a general incapacity for any kind of mental labor. At this time too, certain diseases, both of mind and body, are apt to be developed and which will be considered in another chapter.

## SEMINAL EMISSIONS.

When the patient ceases to indulge in the habit, he will in a short time thereafter be troubled with emissions of seminal fluid, at night, accompanied by lascivious dreams and sensations of pleasure. Erections may accompany the discharge of semen, but they are often absent or imperfect. The impressions made on the nervous system by constant discharges of seminal fluid soon exhibit themselves, in the general symptoms previously enumerated, and require the attention of the physician. Lallemand gives the following curious method of examining for semen, which I fear will be of little use in general practice at the present day: "I have already stated that on causing patients to make water in a bath, the semen passed may be easily recognized by means of its globules which whirl about in the middle of a cloud of foam toward the close of micturition. From what we have just seen it is evident that these globules come from the internal membrane of the seminal vesicles. They may be wanting in very few cases where the semen has no time to acquire consistency; but their presence leaves no doubt, as to the existence of diurnal pollutions, because they can only be furnished by the seminal vesicles. On the other hand, I have invariably found spermatozoa in the urine of patients who observed the phenomena in a bath. The same remarks hold good when applied to the globules which the urine deposits in certain cases of diurnal pollutions, and which have been compared by some to grains of bran, others to millet seed, pearl barley, etc., according to the size. These globules are perceived as soon as the urine is passed; they are roundish, very soft, and do not give any sensation when squeezed under the thumb; they cannot therefore be confounded with urinary salts, which

are deposited only when the urine has cooled, have a crystalline form, and give the sensation of a hard body to the finger. The vesical mucus is deposited only on cooling and does not furnish brilliant granules. As to us its appearance is easily determined. I have found animalcules whenever these globules appeared in the urine; and hence it is that I have pointed them out as certain signs of diurnal pollutions. I have also noticed that in some cases the urine, when held against the light, presents in the middle of a flocculent cloud multitudes of quite characteristic brilliant points. These are smaller and consequently lighter globules than those which in other patients fall to the bottom of the vessel. They are neither observed in the mucus of the bladder nor in the prostatic fluid, which alone presents clouds analogous to those of diurnal pollutions. Such brilliant points also arise from the seminal vesicles, and their presence is therefore an indication that the urine contains semen. This I have often verified with the microscope. I should, however, warn those who wish to repeat my experiments, that it is not in the midst of the flocculent cloud that the zoösperms are to be sought, but at the bottom of the vessel, to which they soon fall on account of the greater specific gravity."

## CHAPTER V.

### RESULTS OF SEXUAL EXCESS AND MENTAL EMOTIONS.

Sexual Excesses not so injurious as Masturbation—Seminal Losses not unhealthy when they occur from natural causes—Differences between Local and General Effects of Sexual Indulgence and Masturbation—Excess as a cause of Spermatorrhœa and Impotence—Mental Emotion as a cause of Spermatorrhœa and Impotence—Effects of Emotion in Hysteria—Simulation of Mammitis, Peritonitis, etc., by Hysterical Patients—Graham's Bed for Impotent Patients—Impotence from Fear, Anxiety, Bad Odors, Business Troubles, Bad Temper, Unusual Surroundings, etc.—Interesting cases of Hammond's and Rouget's.

The natural fulfillment of every function exerts a beneficial influence on the economy. Deleterious effects only manifest themselves when the bounds of moderation are passed. Even when an organ is overworked by natural means there is much less harm done the system than there is from excessive work in an unnatural direction. Men seldom suffer as much from inordinate sexual congress as they do from the same amount of self-pollution. The occurrence of seminal ejaculations three or four times a week from legitimate sexual congress will not be felt very much by a healthy man, while the same number of losses from masturbation or nocturnal pollutions will soon superinduce mental and physical debility. Indeed there are many persons in robust health who indulge in daily intercourse with impunity, while others with perhaps equal stamina, lose flesh from two or three weekly pollutions. The reasons for this are obvious. One act is performed in accordance with the dictates of nature—the other is subversive and degrading. During sexual intercourse the expenditure of

nerve force is compensated by the magnetism of the partner. In all cases, or almost all cases, there is some return of that nature, which prevents injury. The masturbator feels that his act degrades his manhood, while the man who indulges in legitimate intercourse is satisfied that he has fulfilled one of his principal natural functions. There is a healthy instinctive expression of passion in one case, an illegitimate perversion of function in the other. The sexual appetite, like any other appetite, varies with the individual. The capacity for sexual intercourse also varies with the individual. That which would be unpardonable excess for one, would be moderate indulgence for another. There is no invariable law for all to observe. But we have, nevertheless, an easily followed rule as a guide in this matter as in everything else. Whenever sexual intercourse fails to produce its tonic effect, when, instead of exhilaration of spirits and clearness of intellect, there are depression, weakness, tremulousness, anxiety and diminished power of concentration, then the act is injurious and the intervals between each co-habitation should be lengthened. If these warnings of nature are disregarded, a disordered condition of mind and body similar to that which arises from onanism will soon appear.

With reference to this part of the subject Lallemand says: "When connection is followed by a joyous feeling, *bien être general*, as well as fresh vigor, when the head feels lighter, the body more elastic and ready for work; when a greater disposition to exercise of the genital organs evinces an increase and activity, we may infer that an imperious want has been satisfied within the limits necessary for health. The happy influence which all the organs experience is similar to that which follows the accomplishment of every function necessary to the economy."

On the same point Acton says: "Whilst one individual will suffer for days after a single attempt, or even from a voluntary emission, another will not evince the least sign of depression, although the act be repeated several times in succession or on several consecutive nights. Still, as a general rule, the act is, and ought to be, repeated but rarely. In newly married people, of course, sexual intercourse takes place more frequently, and hence it happens that conception often fails during the first few months of wedlock, depending, probably, on the fact that the semen of the male contains but few perfect spermatozoa. In such cases it is only when the ardor of the first love has abated and the spermatozoa have been allowed the time requisite for their full development, that the female becomes impregnated."

"In some persons the termination of the orgasm is accompanied by an epileptiform convulsion of more or less severity. This is succeeded by a great amount of prostration. There can be little doubt that such cases inherit hypersensitive organizations, the result, in all probability, of great excess in early adult life." Acton says, "This is seen in a very exaggerated form in the buck rabbit, who, after every copulation, may be noticed to fall on his side in a sort of epileptic fit; the whites of his eyes are turned up, he gives several spasmodic twitches with his hind legs and lies panting for several moments, until the nervous system recovers itself.

"There are some men in whom this sort of epileptiform orgasm takes place every time connection is indulged in. Napoleon I. is said to have been subject to epilepsy, when, resting from his great labors, he indulged in sexual intercourse. No doubt can exist that deaths which have occurred in houses of ill-fame, as well as on the marriage couch, have arisen from this cause acting upon highly susceptible organizations. Entomo-

logical works abound with cases in which the male dies after the act of copulation. The following, which reads almost like a romance, may be explained, perhaps, by this epileptiform attack killing the frail insect. It is a brief history of the establishment and growth of a colony of termite ants, related by Burmeister :

“ At the termination of the hot season, the young males and females quit the nest and appear on the surface of the earth, where they swarm in innumerable hosts, and pair. The busy workers then convey a chosen male and female back into the dwelling and imprison them in the central royal cell, the entrance to which they decrease and guard. Through these apertures the imprisoned pair receive the nourishment they require. The male now, as amongst all other insects, speedily dies after impregnation has been effected ; but the female, from this period, begins to swell enormously, from the development of her countless eggs, and by the time she is ready to commence laying, her abdomen is about 1500 or 2000 times larger than all the rest of her body.”

Impotence usually precedes the spermatorrhœa, as a result of sexual excess, though sooner or later the latter accompanies it. They are rarely separated. In the majority of cases the excess is continued until there is complete inability to copulate. The seminal sacs being comparatively empty, there is no other symptom. At first the patient notices that his ejaculations occur much sooner than they should, often long before there is any specially pleasurable sensation excited by the contact. Then he rests, or desists from his intercourse for a while, and is surprised at the occurrence of nocturnal emissions. He again essays sexual congress, and perhaps has an emission before penetration occurs. This disheartens him, and he refrains, only

to suffer again from the emissions. If the impotence continue, as it probably will, the semen, which is constantly being manufactured, fills the seminal vesicles, the nocturnal pollutions are trebled in frequency, and very soon all the phenomena which characterize spermatorrhœa are present, and such phenomena must necessarily follow every form of impotence from excess. But there are still cases in which spermatorrhœa is the primary manifestation. From various causes,—not always from lack of virility,—the individual who has indulged to excess ceases his wickedness. The irritation which excess has produced in the genital organs keeps up the rapid manufacture of seminal fluid. It passes away with the fecal matter, or rather is squeezed out from the seminal vesicles by the hardened feces. Horseback riding or similar exercise may also occasion the loss. The majority of patients who lose their virility through excessive intercourse are often in the enjoyment of average health, with the exception, of course, of their local trouble. Many of them are of robust build, full-blooded and muscular, and their animalism is at its maximum development. The local paralysis of the penis, which brings them first to the surgeon, is the direct result of over-work and exhausted nerve force. Few general changes are manifested, except in cases of long standing. In such cases, the morbid appearances noted will be similar to those which arise from long continued masturbation. When patients reach this stage there is more difficulty in obtaining good results from treatment than there is with those affected from masturbation. Recent cases are always amenable to treatment. The surgeon can promise a cure if there are no cerebral lesions.

## MENTAL EMOTIONS.

The influence of the mind over the body is usually underestimated. We are accustomed to regard the mind as something apart from the mechanism of the body, and by so doing often fail to correctly appreciate its influence in producing physical changes of an abnormal nature. "A powerful imagination will create that which it imagines" in a short space of time. A new mental creation, without a basis in fact, obscures and distorts that which is real. The records of hospital and private practice show that there is little limit to the power of this influence in creating organic changes where the nervous system of the patient is abnormally sensitive. In the manifestations of that hydra-headed affection called hysteria the fact is fully illustrated. While an interne of Bellevue Hospital, a patient suffering from hysteria was placed in a bed adjoining another suffering from peritonitis. Twenty-four hours afterwards the abdomen of the hysterical patient became tympanitic and swollen, and she vomited at frequent intervals. In other words she developed all the symptoms of peritonitis without having any peritoneal inflammation whatever. She was removed to another ward, appropriate medicines administered, and recovery took place in a few hours.

A few days after the above occurrence, a patient with inflammation of the mammary gland was admitted to the same ward. The hysterical woman soon called my attention to the fact that her breast was exceedingly painful and swollen. On examining the gland, I found that it was indeed larger than the one on the opposite side, and it appeared to be tender on pressure. Remembering her previous simulation in the same line, she

was removed to another ward and treated with a good shower-bath of three minutes' duration. She recovered rapidly.

Twelve months after she had left the hospital, I was asked by the house surgeon to look at a case of inflammatory softening of the brain, which was supposed to be rapidly approaching a fatal termination. The visiting physician, suspecting a fatal result, told the house surgeon to notify him when dissolution occurred, so that he might be present at the post-mortem. The patient was confined in one of the cells of the institution, and, when I entered, was in a dark corner of the apartment. Her limbs were flexed on the body, and her muscles were rigid. The thumbs were tightly clinched by the fingers. She seemed to be in a state of deep coma, and breathed like a person approaching death. I moved her a little, so as to let the light shine on her face, and to my amazement discovered my old hysterical patient who, the year previous, gave so many manifestations of the influence of the mind in developing morbid changes. I called her by name, shook her, and by persuasion and a little force made her assume a standing position and walk around the cell. The cure was completed in a day or two.

A few years ago I was consulted by a broker who had sustained severe losses in Wall street, which, while they had not made him ill, increased his sensitiveness to an extraordinary degree. No matter how insignificant the occurrence might be, a deep impression was left, which gave him sleepless nights and distressed him during the hours of day. He read in a newspaper one morning of a gentleman falling down in a fit on the street and dying, and the thought immediately came that it would be dangerous for him to go out alone, for fear of a similar fate befalling him. He made up his mind that he could not move a step without company. He would not go alone

anywhere,—refused to ride on the cars or in a carriage of any kind,—not even across the street, unless accompanied by a friend or servant. This condition had lasted a year before he consulted me. I tried by argument to show him that it was impossible that any accident such as he dreaded could happen to a man with his physique and with his otherwise healthy condition, but without avail. I finally prevailed on him to leave his house without company the next morning, promising him if he did so that I would, at 9 A. M., meet him one block from his abode. He did come out alone, and I met him as by appointment. The same thing was repeated the next day, though he was in a state of intense excitement when I reached him. I then made him promise to meet me a block further away the next day, and at the appointed hour was at the meeting place, but I stood out of the way, where I could see him and yet not be seen by him when he came out. When he stepped out of the house he looked around for a moment hesitatingly, and then started with a rapid movement for the place of appointment, looking anxiously about for me. When he had accomplished about half the distance he suddenly stopped and grasped the railing, and if I had not immediately stepped out and shouted to him he would have certainly fallen, from fear only, and might possibly have suffered seriously. When I reached him he was deathly pale; he trembled like an aspen; his hands and face were cold and clammy, and his pulse could scarcely be felt at the wrist.

It was only with a great deal of difficulty that I got him safely to his room. After that I persuaded him to meet me a block above the last place, and continued to meet him daily, each time extending the length of his walk alone until he was able to reach his office unattended. I subsequently increased his walk to

60th street, two miles from his boarding place, and besides which, I induced him occasionally to ride on the horse car; gradually working him into a better state of mind by developing his self-reliance, he finally recovered.

Dr. Carter relates the following: "A lady who was watching her little child at play, saw a heavy window-sash fall upon its hand, cutting off three of the fingers; and she was so much overcome by fright and distress as to be unable to render it any assistance. A surgeon was speedily obtained, who, having dressed the wounds, turned himself to the mother, whom he found seated, moaning and complaining of pain in her hand. On examination, three fingers corresponding to those injured in the child, were discovered to be swollen and inflamed, although they had ailed nothing prior to the accident. In four and twenty hours incisions were made into them and pus was evacuated; sloughs were afterwards discharged, and the wounds ultimately healed. Now in this case there can be no doubt that the mother's emotion was directed, by observation of the parts injured, upon the corresponding parts of her own system, thus working a change in the circulation or nutrition, sufficient to excite acute inflammatory action."

Mental emotions have a more powerful influence over the functions of the genital organs than they have over any other functions in the body. No organs respond so quickly to this influence. Mental emotion is a powerful factor in all cases of impotence connected with sexual excess or masturbation. It occasions impotence among married men, as well as among those who are single. Even where men have been abstemious, and moderate in the indulgence of their passions and entirely free from the reproach of onanism, they are subject to impotence from mental causes. An exceedingly slight cause operating

through the mind, may result in its sudden and untimely development. A disagreeable object, a jest out of place, a fit of indigestion, troubles in business, family jars, leucorrhœal odors, pre-occupation of mind, unusual surroundings, fatigue, a doubt whether the act can be completed, have all been recorded as sources of failure in sexual intercourse. Fear, or anxiety, is probably the most frequent cause of failure, especially with those who have masturbated. Being subject to emissions when not indulging in intercourse, and knowing them to indicate relaxation and weakness, they read pamphlets on the subject and thus further increase the fear of failure. Their minds run on the mental decay and loss of manhood which arise from impure habits, and with this thought torturing the mind, the first attempt at intercourse necessarily ends unsuccessfully. The first failure is a sure precursor of other failures to follow, all due to the emotion of fear, and this fear will last and keep up the impotence until relief is obtained from the physician. In connection with this temporary impotence, the hourly concentration of the mind on the parts disorders the circulation, increases the irritation of the genitals, and if spermatorrhœa has not manifested itself previously, it will do so at this stage, as the result of mental influences and bad habits. Even in persons of vigorous health, impotence may result from fear. Impotence has been produced in a healthy man by a friend's recital of his own surprising failure. The thought of the accident that befell the friend occurred at the time of intercourse, and he too failed. A married patient of mine, a lawyer, with excellent physique, the father of two children, became temporarily incapacitated in this way: reading in a medical journal that impotence might attack healthy persons, temperate in all things, and without notice, he became impressed with the fear that a similar acci-

dent might befall himself. Curiously enough, the next time he attempted intercourse, the fear took complete possession of him, and he became temporarily impotent.

Roland speaks of a gentleman who, while on a visit to the country, was seduced by a lady in full walking costume. During a period of one year, he continued to cohabit with the same woman, under similar conditions, namely, she was invariably dressed. He finally married an estimable and healthy woman, and though in the full exercise of all his mental and physical powers, he was unable to begin or even to complete the act. Repeated trials ended like the first. His previous intercourse with a woman in full dress had disturbed his equilibrium so much that he could not complete the act until his wife had her clothes on.

In Hammond's interesting work on impotence I find the following : "A married gentleman who, before entering into the matrimonial state, had been excessively given to sexual intercourse, but who had no reason to think that his powers were exhausted, or even materially weakened, found himself on his wedding night and for some days thereafter, absolutely incapable of consummating the marriage. His wife was a highly educated, intelligent, refined and beautiful woman ; he was devotedly attached to her, and on marrying had once and for all given up all the evil associations of his younger days. His passions were strong, but as soon as he attempted intercourse, the desire, which he had previously entertained, vanished at the thought that it was a profanation for a man like him to subject so beautiful and pure a woman to such an animal relation as sexual intercourse. 'She is too good for me,' he would say to himself, 'I ought to have married a woman used to this sort of thing, or, better still, have remained single and gone on in the

old way.' This happened several times, and then, in disgust with himself, he paid a visit to one of his former female associates, and in a short time satisfied himself that his powers were as good as ever. Again he essayed the act with his wife, and again he met with disappointment. He had now been married a week, and the marriage was still unconsummated. He then came under my care. A case like his presented very little difficulty. I reminded him of the fact that in all probability, however pure and noble his wife might be, there was no profanation in sexual intercourse, chastely undertaken ; that she had sexual organs which were intended for the performance of certain functions ; that these functions were all connected with the propagation of the human species ; that there was but one way that I knew of by which the species could be propagated ; that she had selected him for the one man who was to put her in the way of fulfilling her office in the grand scheme of nature, and that my advice to him was to lower his estimate of her angelic character, and to look upon her in the not less worthy light of a woman to be treated as other women are treated under like circumstances. He left, promising to be less exalted in his appreciation, but the next morning he returned with the information that it was no use : he had tried his best, his erections were strong and repeated, but as soon as he went further towards the object he had in view his desire became utterly extinguished. 'She was too good, too delicate for an animal like him ; he could not desecrate her beautiful body by any such vile act,' etc., etc.

"From a few words which he let drop, I became convinced that the lady was not so platonic a creature as he thought, and that if I could have a few words of conversation with her, I could probably end the matter to the satisfaction of both parties. I therefore expressed a wish to see his wife, and that afternoon,

with his concurrence, called on her at the hotel at which they were stopping during their wedding tour to New York. I found her to be a very sensible woman, not at all ethereal, but anxious to do her share towards relieving her husband from his embarrassing position, of which she only half comprehended the character. I requested her to be a little more free in her manner with her husband than she had yet been, and told her I thought that if she pursued that course there would be no further disappointment, but that she was not to act as though she had received any instruction from me, but rather as though she was disregarding what I had said to her. 'The details, of course, I left to her own good sense and womanly feeling. The plan was eminently successful, as her husband told me with great glee the next day. 'She told me,' he said, 'that she did not want any doctors about her ; that she could settle this affair herself.' 'The rest,' he continued, 'is confidential between her and me, but, by heaven, it reminded me of old times !' It is scarcely necessary to add that there was no further trouble."

Another example of the influence of unusual surroundings over the genital functions was furnished me by a medical man who consulted me about his failing virility. He stated that about five years before he had for the first time in his life cohabited successfully. Subsequently he attempted the act in the day time, while dressed, and found himself impotent. Being of a determined disposition, he continued his attempts under the same circumstances, and with the same results. He had no hope of recovery and was completely broken down in mind on account of his repeated failures. On examining his genital organs, I found no sign of abuse or relaxation. He denied all excesses. I ordered him to abstain from any attempt

for some weeks—to travel, and to occupy his mind with other subjects, and I advised him at the end of this probationary period to marry, as I considered him perfectly competent to indulge his sexual organs in a legitimate manner. He took my advice, married, and found no difficulty in sexual congress. Two months subsequent to his marriage he attempted cohabitation with his wife when dressed, and failed as he had in the beginning. This second mishap compelled him again to seek advice. Feeling assured that it was only the difference in surroundings which caused his failure, I told him to dispense with all experiments of the kind mentioned, and only indulge his venereal sense in the seclusion of the chamber, and without the accompaniment of dress. Since he confined himself to this rule, he has had no further trouble. It is extremely probable, however, that he will always be impotent whenever he has his clothes on.

Grimaud de Caux relates the case of a prominent mathematician, who married a lady in every way suited to him. Both were in perfect health, and desired children, yet at every attempt to complete intercourse some abstruse problem would insinuate itself into the mind of the professor and destroy at once all capacity for the performance of the act, and he was compelled to give up the attempt. Again and again the same accident occurred. It seemed utterly impossible for him to control his mind in the matter of mathematical problems, sufficiently long to accomplish anything. The family physician finally counselled him to get partially under the influence of alcohol and then try. He took the advice, and was enabled to reach the desired goal without any further trouble. I recall a somewhat similar case, a young professional man who had been sued for a large sum of money, that had been used by other

people, but for which he was responsible. The thought of his unjust debt entering his mind at the moment that he was attempting intercourse, rendered him completely impotent. And notwithstanding the fact that his erections were perfect, he was by this interruption, this mental perturbation, rendered absolutely impotent until arrangements had been made to remove the debt that troubled him.

The history of the celebrated quack, Graham, who flourished in London many years ago, shows that the influence of mental emotion on the functions in copulation was well recognized by him. His shrewdness and intuition struck at a most important fact, which the scientific minds of the profession of his day did not grasp. Graham prepared a richly canopied bed, of large dimensions, and with glass legs. He offered the use of this bed to persons suffering from spermatorrhœa and impotence, guaranteeing perfect success in sexual congress to all who made use of it. (Bartholow.) One hundred pounds per night was the price charged for its use. The bed proved a brilliant success and cured many who considered their virility as hopelessly impaired.

The mental distress occasioned by a chronic clap, or gleet, is often a cause of impotence. A patient of mine, now under treatment, always fails if he notices the discharge before retiring. Another that I know, is impotent with his own wife, but with strange women has no trouble whatever. Another is impotent, unless he is able by a powerful effort of the imagination to make himself believe that the legal partner of his bed is some one for whom he has a stronger feeling. Here, of course, there must be an entire absence of that magnetic attraction which begets a feeling of desire or attachment and that regard and esteem which render marriage endurable—or an uncontrollable

aversion, which working together with other causes produces the impotence.

All physicians who have much experience in the treatment of cases of impotence and spermatorrhœa have long ago recognized the fact that a very large majority are entirely of mental origin. No matter what local manifestations of the disease may present themselves to the eye of the physician, there is always an element of mental influence in the development of the impotence which should never be lost sight of. Such cases are by some called false impotence. I can see no reason for such a name. The impotence while it lasts is real—and it often lasts months and years, and indeed may last during a lifetime, if not properly treated. And if the cause of it is not removed, it certainly will last a lifetime. A division might be made by classing them as incurable and curable cases. And it must be borne in mind that almost all of the cases can be cured.

Where the disturbed mentality is a cause of impotence, every abnormal or even normal discharge is magnified a hundred-fold. The disturbed and distorted mental condition reacts on the genitals, interfering with their proper blood-supply, diminishes the nerve force, and brings into being phases of genital weakness. The nocturnal as well as the diurnal emissions are increased, and all the mental depression which accompanies them. Indeed, were it not for the disturbed mentality which these disorders of the genital function excite, physicians would have little to do in the way of treatment. The mental disorder is the great obstacle to successful treatment. And though the patient may be aware that his disease is imaginary, he cannot regulate or command his ideas in the matter, cannot bring himself to a reasonable state of mind, no matter what advice he receives, until he perceives some diminution in the local trouble, procured by therapeutic measures.

## CHAPTER VI.

### DISEASES WHICH RESULT FROM EXCESS AND MASTURBATION.

Deterioration of the Seminal fluid as Cause of Pulmonary Consumption—Changes in the Characters of the Secretions—Hereditary Weakness—Why Phthisis develops as a direct result of Masturbation—Phthisis among young Married Persons—Erotic desires of Consumptive Patients—Epilepsy—Connection of Epilepsy with Onanism—Changes in the Nerve Centers as a Result of the Disease—Convulsive Seizures during the Orgasm—The Center of Sensation and Voluntary Motion—Irritation of the Tuber Annulare causes Convulsions—Termination of Epilepsy or Insanity—Is Insanity caused by Sexual Excess and Masturbation—Opinions of Various Authorities—Peculiar forms of Insanity arising from these Causes—Nymphomania and its causes—Characteristic Cases—Marriage and Amputation of the Clitoris as a Cure for the Disease—Satyriasis—Curious manifestations of Satyriasis—Aspermatism—Sterility.

“The sins of the father shall be visited on the children, even unto the third and fourth generation.” Nowhere in the category of disease is the truth of this saying so manifest as in the case of masturbators. The evil that they do lives long after them. Their vicious habits, continued as they are through the period when nature is endeavoring to create a vigorous condition which will resist the wear and tear of active adult life, leave an indelible impress on the whole structure. All the tissues and secretions of the body are affected, and the seminal fluid partakes of the general deterioration. It is thinner, more watery, of a pale yellowish white color, and contains fewer spermatozoa than it does in a healthy condition. The movements of the spermatozoa as seen under the microscope seem to have much less activity than the spermatozoa from a healthy, vigorous

man. Pus and epithelial cells are likewise present in variable quantities. This defective seminal fluid is sure to give to the foetus the seeds of weakness and decay which are ready to germinate with the first exciting cause. There is no more potent factor in the development of disease. The child of masturbating parents enters the world with vitality so impaired that there is a constant invitation to the attacks of every affection. The child commences life with a highly organized nervous system, morbidly sensitive to every external impression. The muscular and osseous tissues are much softer than they are normally. I have never yet seen a case of rickets in a child whose parents did not give some voluntary or involuntary evidence of a pernicious habit, or of sexual excess of some description.

The digestive and assimilating organs work feebly, little nourishment is taken into the stomach and a portion of that which enters that organ passes unchanged through the alimentary canal. Dyspeptic symptoms of all kinds are commonly present. The integument is thin and pale, and the delicate blue veins are easily traced through its transparent surface. The lymphatic glands are enlarged and liable to suppurative inflammation. The child frets and worries, is generally peevish, complains of headache and grows up thin, puny and weak with all the tendencies which are said to characterize a scrofulous diathesis.

Many cases of pulmonary consumption are directly traceable to the secret sin of the father. It is not so easy to detect the mother's share in the results, for the simple reasons that she cannot be questioned about the matter at all, and because many of the appearances which are found connected with old habits of masturbation are also seen in various forms of uterine disease.

An examination of the labia and vagina of the mother when it can be obtained without exciting her suspicions will often show the changes due to excessive friction and pulling, and establish the amount of responsibility that rests on her shoulders for the existence of the disease in the child. I have for many years made it a practice to get at the history of the parents of consumptive children and my examinations so invariably confirm my suspicions that I have now no doubt whatever of the direct relation between masturbation and hereditary phthisis. I know that others in active practice have examined and treated such cases and have been able also to trace the lung disease to its legitimate origin. But though consumption results from the transmitted weakness descending from parent to child, it is also developed directly in young men and women from long continued masturbation as well as from sexual excess. This fact was first brought prominently before my mind by an examination of fourteen young patients suffering from phthisis in Charity Hospital. Only two gave a positive history of hereditary predisposition to the disease. Ten of the number acknowledged that they had been addicted to onanism in their childhood and had practiced it for years. It was of course impossible to learn anything of the character or habits of the parents of these hospital patients, for they were not present to be examined, and it is possible that the tendency might be transmitted. Since that experience, however, I have repeatedly put the question to other sufferers and have accumulated convincing evidence on the point. I am repeating nothing new when I say that those whose nutrition is poor and below par are peculiarly liable to attacks of phthisis. One of the effects of excessive indulgence is a disarrangement, or, rather, an exhaustion of the nervous system or of the nervous force, from

the successive shocks of the orgasm. Then follow indigestion, constipation, (which is only a result of indigestion) and lassitude, all tending to impoverish the blood, and the road is thus opened for the first bad cold to set up chronic inflammation in the lungs, or other forms of pulmonary consumption.

The erotic tendency of consumptives has been the subject of remark by many different authorities. It is mentioned as a peculiar phenomenon connected with or caused by the disease. The truth is, however, that the erotic tendencies antedate the phthisis. They are the direct result of excess, sexual or otherwise, and are not the result of the destructive processes at work on the lung. Phthisis is the legitimate effect of ignorant assaults on the genital organs, carried on through that part of the lifetime when the active forces should have been devoted to the protection and the development of the rapidly growing tissues. Gall relates the case of a consumptive who exhibited this tendency in its worst aspects. The patient was a married lady who had been the victim of untrammeled desires. She developed phthisis at thirty and the disease ran a rapid course towards a fatal termination. She nevertheless curtailed none of her sexual enjoyments. Indeed they seemed to grow with the disease, until they became her sole thought and care. A day or two before her death while lying in a moribund condition, unable to move and not able to speak above a whisper, with every mark of rapid dissolution about her, she importuned her husband to engage again in sexual congress with her. The case is a painful but not an uncommon one.

Professor James R. Leaming of this city thinks "that phthisis, especially of the fibroid variety, is induced by any cause which lowers the vitality of the life of the body, expressed in the ganglionic system of nerves, and in the blood. Over

sexual indulgence and onanism certainly lower the vitality greatly and are the more frequent causes of commencing phthisis-plastic interpleural exudation in quite young men and women."

Excessive sexual indulgence often brings about similar affections of the lungs, but such cases cannot be traced as readily as those arising from masturbation. Many of the cases of phthisis occurring among young married people during the first year of their new life, are attributable to excessive cohabitation. Certainly they are frequent enough to give strong presumptive evidence that some form of excess is the primal cause of the mischief, or at least that some hereditary weakness has been assisted by their own over indulgence. Here again is another result of ignorance concerning the sexual function, and its ultimate purposes in the economy of nature. It is reasonable to suppose that even a very moderate amount of information concerning the use and abuse of the genitals—even less than advised in a previous chapter, would diminish the number of these distressing cases in every community.

#### EPILEPSY.

It was noticed many years ago, that patients suffering from epilepsy were in the habit of gratifying the venereal sense in many curious ways. Their erotic tendencies were developed without regard to time, place or circumstances. And it was believed that epilepsy, or the same lesions in the nerve centers which produced epilepsy, were the prime factors in disordering the sexual functions. Further investigation, however, showed that the sexual vagaries of the patient existed long before convulsions appeared, preceding them by many years, and that the epilepsy of such patients was due to over-excitation of the

nervous system by the secret vice. Of this there can be no doubt. The irritability of the nerve centers is remarkably increased in all onanists. Specially is this true of that portion of the brain known as the *tuber annulare*, a collection of gray matter in the pons varolii. This point is the great center which governs sensation and voluntary motion. Longet says that all sensations coming from the periphery to the brain, are converted into motor impulses through this ganglion. And any undue irritation of the part will excite irregular muscular movements.

The abnormal excitability of the medulla oblongata, which also arises from the secret habit, is said to be an important factor in producing these convulsions. Hammond considers that all forms of eclampsia arise from abnormal irritability of this portion of the nervous system. Wherever the actual starting point of the convulsions may be, one thing is certain, viz., the condition of the nervous system is such that slight irritation from within or without may develop involuntary spasmodic contractions of the muscles ordinarily under the control of the will. Dr. Baker, of the Cambridgeshire Asylum, says, "in seven out of ten cases of chronic epilepsy in the male sex, the genital organs are the great sources of excitation, and generally from the morbid state in which they are kept by the habits of the patient." Dr. Flint relates the case of a young lady twenty years of age who suffered from daily epileptic fits for three years. She stated that the habit of masturbation was taught her at the age of six, and had been indulged in daily until she was sixteen. Afterwards her mind was constantly filled with lascivious dreams, and during the three years of her epilepsy lascivious dreams attended by an orgasm had occurred every night. Baker Brown, of London,

attributed the cause of epilepsy in young females to the same cause, and partially proved his theory by amputating the clitoris of each case coming under his care. The operation was remarkably successful, a large majority of his patients making a complete recovery after the operation. Some years ago I had an epileptic masturbator under treatment in Charity Hospital. He foiled every attempt made to prevent him from masturbating. The penis and scrotum were blistered, so that he could not touch them, but he still managed to complete the act by rubbing the perineum with his fingers. His hands were tied behind his back, but this also was unsuccessful, for the next day he was seen to slide down to the foot of the bed, and rub his perineum against the foot piece. He was finally tied hand and foot to the bed, so that he could not move a muscle. This plan of course could not be continued, and whenever he was released in order to change the bed clothes, or to perform some other necessary duty, his hands almost instantly sought the neighborhood of his genital organs. He was sent subsequently to an asylum as incurable.

Serrurier reports an interesting but equally painful case, viz., that of a soldier who was the subject of convulsions from sexual indulgence and masturbation. In the midst of his most violent paroxysms he endeavored to excite himself and produce an orgasm. This condition lasted six months, when death released him from his sufferings. Zimmerman speaks of a patient under his care who endured an epileptic convulsion whenever he masturbated, or had nocturnal pollutions. Every emission, irrespective of its cause, was invariably accompanied or followed by a convulsion. Esquirol mentions the case of a young woman of an ardent temperament who became epileptic three days after marriage. It was supposed by her

physician to be a direct result of inordinate indulgence in sexual congress.

Occurrences like these quoted are numerous. Hospital records are full of them, and they are not exceptional cases either, selected to prove a theory for the satisfaction of the originator. They make up a very large number of the epileptics in all the hospitals where such cases receive special care and medical supervision. They prove that epilepsy is one of the goals towards which all masturbators and libertines are hastening, and one which is reached in a very short space of time, when the will power to prevent excess is weakened or destroyed.

#### CHANGES IN THE CIRCULATORY SYSTEM FROM ONANISM AND SEXUAL EXCESS.

I have already mentioned that dilatation of the superficial veins of the extremities is a sequence of long indulgence in masturbation and excessive sexual congress. Preceding and during the orgasm the respiratory movements are spasmodic and irregular, and for a moment are completely suppressed. The consequence of this is an obstruction to the current of blood flowing towards the thoracic cavity, and a greater general fullness of the veins of the extremities. Such repeated distension of the veins as occurs from frequent pollutions becomes more and more marked until the relaxed and venous walls become permanently dilated. The same effect is produced in old age from natural causes, and also from cardiac lesions.

But it is not the superficial veins only which are thus affected. The right side of the heart likewise takes part in the morbid process. The dilatation may involve the right auricle, and the ventricle of the same side, but generally the auricle alone is affected. The dilatation is soon followed by

hypertrophy. It has long been remarked that roosters who controlled the barnyard are subject to enlarged heart. The enlargement has a similar origin to that which occurs in man, over action of the heart in sexual intercourse. For like every muscular organ in the body which is called upon to do extra work, it must increase in size.

Palpitation of the heart is a troublesome symptom in these cases. It must be borne in mind, however, that palpitation may be due to simple weakness and nervous prostration, in the same class of patients. Slight exercise occasions much shortness of breath. Capillary congestion of the extremities especially is well marked. The hands are cold and blue, and the pressure of the fingers on the integument leaves a white mark surrounded by a dark ring which disappears slowly. Acton says : "I have seldom met an instance of sexual excess in which complaint of the heart's action has not been made. Patients assert that they can make no exertion without suffering under palpitation. In order to satisfy myself that these affections of the heart were not organic, I have met in consultation most of the ablest men in London, and we have come to the conclusion that these patients are suffering from functional disease of the heart, and consequently the prognosis becomes much less serious, provided, as I stated in the preceding, the patients will forego these excesses, and treatment is prescribed calculated to enable them to gain mastery for their will and to exert self control."

Vertigo is likewise a common symptom. I have noticed frequently that the patients subject to vertigo were also troubled with fainting spells. Females are more liable than males to be affected by syncope. Anemia of the brain from weakened action of the heart may cause both syncope and

vertigo. (See page 174). Vertigo, however, often arises from other conditions such as an afflux of blood to the brain, and irregular circulation of blood in the cerebral hemispheres.

#### PATHOPHOBIA

Or hypochondriasis, is associated with disorders of digestion in many diseases. Its development, as a result of masturbation or sexual excess, is usually co-incident with stomach and intestinal troubles, occasioned by the disturbance of the sexual function. It is rarely absent when the patient has reached middle life. The awakening from a self-complacent course of sexual enjoyment, is the beginning of the pathophobia. Nocturnal pollutions and impotence add to the gloom, and suicide often terminates the wretched victim's misfortune. Even in mild cases of pathophobia, the patient imagines that his disease will certainly terminate in complete destruction of mind and body. He shuns his friends and avoids society. He distrusts those whose honesty and truth he formerly relied on. Business troubles, however slight, haunt his vision sleeping or waking. A dread of accident or sudden death adds to his misery. Every little ache or pain is magnified into a fatal affection. He torments his physician with notes of inquiry and visits (Flint). To-day he fears consumption, and his lungs must be examined ; to-morrow he is certain of heart disease, and dissolution is imminent. A headache satisfies him that cerebral inflammation or apoplexy has commenced. The stiff-joint of rheumatism is all the proof he requires that the usefulness of the limb is forever destroyed. In short, he makes day night, sunshine darkness, and gladness sorrow. There is no light anywhere. The gloom of the grave is over him. And unless relief should come in the shape of judicious advice,

or systematic treatment, insanity or suicide will terminate his affection.

#### INSANITY

Often follows epilepsy and pathophobia as a result of abuses of the sexual organs. The former is more likely to terminate in insanity than is the latter. Insanity, however, is liable to occur, as a direct result of onanism or sexual excess, without the development of either of the above mentioned affections. Authorities differ as to the percentage of cases of insanity arising from self-abuse. The principal authorities on the subject say that ten per cent. of all cases of insanity are traceable to masturbation and sexual excess. Deslandes states that of two hundred and fifty-six individuals in the asylum for the insane at Charenton, forty-four men and three women owed their diseased mentality to the same source. This statement would indicate that males are affected much oftener than females. But it must be remembered that it is more difficult to obtain a history of self-pollution from the latter than from the former. Much is hidden from the eye of the physician, consequently many cases of feminine insanity due to the secret vice pass through without diagnosis, and are then classed under a different head. Bourgeois, however, errs on the other side. He says that the insane at La Saltpetrière consist of prostitutes whose insanity originated in debauchery. He does not consider that any other elements might enter into the development of the disease. A few, at least, of these unfortunates must have had remembrances of a nobler and purer life. In their better moments the utter hopelessness of their condition must impress them. They feel then that they are forever shut out from home, friends and society, and that they are outcasts in every sense of the word. Despair and

mental anxiety must then be counted as factors in some of these cases at La Saltpetrière. Then, again, the effect of alcohol must be taken into account. All these unfortunates are addicted to the alcohol habit, and of course must suffer from all the mental and physical derangements consequent upon that habit.

Insanity among masturbators is more apt to develop in those whose intellectual capacity is below the average, and in cases where loss of memory occurs as a prominent feature in the early stages of the vice. Persistent loss of memory is always a precursor of serious mental disease. Maudsley says, "Self-abuse is the cause of a particularly disagreeable form of insanity characterized by intense self-feeling and conceit, and profound moral disturbance in the early stage, and later by failure of intelligence, nocturnal hallucinations and suicidal or homicidal propensities." Dr. Ritchie says that these cases chiefly occur in members of families of strictly religious education, and those who from this cause become insane have generally, to all appearance, been of strictly moral life and recognized as persons who paid much attention to the forms of religion. As will be afterwards more fully stated, it is frequently observed, especially in the acute attacks resulting from this cause, that religion forms a noted subject of conversation or delusion. "The parent, after her son (the only child it may be) is taken to an asylum will tell you that his insanity cannot be accounted for. He has been so well conducted, so quiet and studious, not seeking the company of the gay, the idle and the thoughtless, but remaining quietly at home rather than joining the social amusements of those of his own age. Further inquiry may elicit that he has been of good abilities, and it may be, clever in his occupation, that he had few friends and rather shunned

the society of the other sex. Had he been other than he was, some cause might have been found in the irregularities of life to cause insanity in one scarcely beyond boyhood's years ; but in such a quiet lad, and so carefully brought up, she is unable to suppose a cause. Then she may tell you that for some time past a gradual alteration has been going on ; he has changed not only in manner but in appearance ; he has become so peevish and irritable, so reserved in his conversation, so apathetic in manner, so slovenly in dress, so contradictory, and so uncertain in his actions, so hesitating, first determining on one thing and before he could execute the course determined on changing to some other, and has such a want of self-reliance. That quite recently, he has grown more and more apathetic, more slovenly in dress, paying less attention to cleanliness, and become slower in his actions ; that he is now not only irritable in his temper, but is at times violent ; that he does things by fits and starts, is impulsive, deliberating long and then suddenly hastens apparently to carry out his intention, and has become so stupid looking and lost, and incapable of taking care of himself or his business, and all this has occurred without any apparent cause, except it may be his studious habits. At last he can be borne with no longer, he is unmanageable in a private house and is obliged to be removed from his home."

" On entering an asylum for the insane, especially if it be one receiving patients from the middle as well as from the lower class of society, there is one group of inmates which may arrest the attention of the visitor from the contrast presented to the excited persons around him, on the one hand, and to those who are convalescent on the other. Engaged in no social diversion, the patients of this group live alone in the midst of many. In their exercises, they choose the quietest

and most unfrequented parts of the tiring grounds. They join in no social conversation, nor enter with others into any amusement. They walk alone, or they sit alone. If engaged in reading, they talk not to others of what they may have read ; their desire, apparently, in the midst of numbers, to be in solitude. They seek no social joys, nor is any wish for fellowship evinced.

“ The pale complexion, the emaciated form, the slouching gait, the clammy palm, the glassy or leaden eye, and the averted gaze indicate the lunatic victim to this vice.

“ Apathy, loss of memory, abeyance of concentrative power and manifestation of mind generally, combined with loss of self-reliance and an indisposition for or impulsiveness of action, irritability of temper, and incoherence of language are the most characteristic mental phenomena of chronic dementia resulting from masturbation in young men.

“ As in diseases of an exhaustive nature, we find that the cutaneous secretion is poured forth abundantly, so in the cases occupying our attention the perspiration breaks forth on the slightest exertion. This relaxed condition of the perspiratory system is especially marked in the palms, and the exception is to find these dry on a masturbator, for generally a damp, cold clammy perspiration is constantly present, and makes it particularly disagreeable to take the hands of one of these persons. The sub-tegumentary layer is but sparingly supplied with fat, which is remarkable, considering the little exercise these patients, if left to their own guidance, would take.

“ In acute or recent dementia, the condition of the patient is most pitiable. His existence is, for a time, merely vegetative, and in well marked cases the obstinacy of disposition is almost the only indication of mental action, and the mental origin

of those may be denied. The sufferer becomes quite silent, and is lost and unable to take care of himself. He becomes statuesque, and extremely obstinate. He resists passively, and occasionally actively. If he be in bed, he will not rise to be washed or dressed. If up, he will not retire at proper time to bed, or allow himself to be undressed. Everything requires to be done for him. Cleanliness is neglected, and his dress unattended to. He makes no effort to speak, and, when addressed, although conscious, does not appear to comprehend what is said. He will not feed himself. Ellis says : 'Would that I could take its melancholy victims with me in my daily rounds (at Hanwell Asylum) and could point out to them the awful consequences which they do but little suspect to be the result of its indulgence. I could show them those gifted by nature with high talents, and fitted to be an ornament and a benefit to society, sink into such a state of physical and moral degradation as wrings the heart to witness, and still preserving, with the last remnant of mind gradually sinking into fatuity, the consciousness that their hopeless wretchedness is the just reward for their own misconduct.'

With regard to the tendency to commit suicide, Dr. Ritchie says : "The greater frequency of this occurs in those whose cases assume a melancholic character with the excitement. Although it will be found that various supposed causes may be alleged, still I believe that in the greater proportion of such cases the immediate exciting cause is the feeling of distrust at, combined with alarm for, the consequences of the patient's criminal conduct. Hence it is that feelings of their own unworthiness arise in such patients, and under the impression that they have committed the unpardonable sin, have sinned against the Holy Ghost, and that a future world presents no

hope of joy or happiness for them, as they are excluded from it by their own conduct, they frequently make attempts to terminate their own existence. Such an act is occasionally incited by hallucinations of the aural organs, but I have not found that suicide is so frequently to be traced to this as in other cases of mental aberration depending on other causes."

Acton says : " In some patients, rash and even criminal acts are the result of the idea that an atonement may thereby be made for the sin committed. The attempt to injure the genitals and similar extravagances often, I believe, arise from such insane fancy while, on the other hand, extravagant masturbation or the tendency to commit rapes or unnatural crimes may be in some cases traced to the not less insane desire the sufferer feels to test and to prove to himself or others that he is not impotent." Acton thinks that many of the cases of sexual insanity may be cured by appropriate treatment. Dr. Ritchie and other authorities give an unfavorable prognosis in all cases. From my own investigations I am strongly of the opinion that a perfect cure is impossible, and that when there is an apparent amelioration of the symptoms, lasting perhaps long enough to buoy the hopes of those related to them, they suddenly return to their old condition of hopeless dementia. The cases of sexual insanity that have come under my own observation have been most difficult to manage. The patients usually have lost all moral sense. Their will power has succumbed to the most brutal instincts. The drain on their nervous system is kept up by nocturnal pollutions. They are consequently not amenable to the usual methods of treatment pursued in other forms of the same disease.

Dr. A. E. McDonald says : " In a general way, I may say that the two causes of insanity named are much less potent (in

my experience) than they get credit for. They are far oftener effects, than causes of the insanity.

"When they are undoubtedly the causes, the insanity resulting (generally Primary Dementia in the case of onanism, and General Paresis in the case of sexual excess) is usually incurable under any known system of treatment."

In reference to the same point, Dr. E. C. Spitzka says: "Where masturbation is a pronounced feature some writers use the designation 'insanity of masturbation.' In reality the masturbation, although a frequent accompaniment, and perhaps a result of hebephrenia, is not its cause, however much this habit may ultimately modify the character of the psychosis.

"The claim that there is a constant relation of sexual excesses to the development of paretic dementia, as primary causes, contradicted as it has been by high authority, is not supported by these figures. No one will claim that the Anglo-Saxon is more libidinous or less able to endure indulgences than the other races. If any reflection were to be cast on any race in this respect, it would be the negro race—which shows the least percentage of paretic dementia—to which a libidinous character might be assigned. When it is borne in mind, too, that where the negro lives under conditions natural to him, and where he is not compelled to enter into competition with a higher race, paretic dementia is almost unknown."

#### NYMPHOMANIA,

Sometimes called furor uterinus, is a disease peculiar to females. It often arises from masturbation, or excessive sexual indulgence. It has also been known to occur from the sudden cessation of such pleasures. Sometimes it manifests itself in healthy young women who have never masturbated, and who

are innocent of any practical knowledge of the sexual relations. Such persons are naturally passionate, and their unsatisfied desires, their continence, is the real exciting cause of the affection.

Nymphomania is apt to occur between the ages of sixteen and twenty-five. Blondes are more frequently subject to it than brunettes. It is characterized by an uncontrollable appetite for lascivious pleasures, exhibited (in its worst forms) in public and private, without regard to time, place, or surroundings. In mild cases the patient is nervous, easily excited, subject to hysterical attacks, and is constantly exciting herself in various ways to provoke an orgasm. The mind is full of lascivious ideas which find vent in self-pollution. While there is any modesty left, the patient deceives every one with regard to the true state of her feelings. She will invent numberless diseases to account for her condition, and for the purpose of being manipulated by the surgeon. Every disease that necessitates an examination of the genitals will in turn be taken up. A curious instance of this nature occurred in my wards, while House Physician in Bellevue Hospital. A girl aged eighteen was admitted, supposed to be suffering from retention of urine. She was thin, her eyes were deep-set, but bright and staring, and were often filled with tears. Her statement was to the effect that she had passed no water in three days; that she was subject to these attacks, and was treated by having her water drawn off. I introduced the catheter and found only a few ounces of urine in her bladder, not enough, indeed, to corroborate her history. The next morning, as she had not urinated during the night, I drew off the urine again. While doing so I noticed by a series of peculiar convulsive movements, that she was under the influence of strong excitement. A further examination showed that the labia minora

clitoris, and adjacent parts were red and swollen, and bathed in a profuse mucous secretion. I then remembered that on the previous evening she had shown a somewhat similar state of excitement, and gave the nurse orders to watch her closely all day. In the evening the nurse informed me that the patient kept up a constant friction of the genitals, when she supposed no one was watching. And even when eyes were on her, endeavored, by uneasy movements in the bed, to continue the titillation. Knowing, then, what I had to deal with, the patient was given a sedative, and told that she must empty her bladder without assistance. For thirty-six hours subsequently she obstinately insisted on her inability to urinate; but when she was assured no catheter would be employed again, there was no further retention. Soon after she left the hospital I learned that a friend of mine, a physician, was treating her for uterine disorder; but he, too, soon found out the true nature of the case, and advised her to get married. What afterwards became of her I do not know.

Winslow gives an example of the worst form of nymphomania, in the following case: The patient was highly educated, of good family, and with everything about her to make her contented and happy. Unfortunately she learned to masturbate. The habit took complete possession of her. At the age of eighteen she threw off all disguise, and masturbated, morning, noon and night. No circumstance prevented her. And even when placed in charge of attendants, and unable to employ her hands, she indulged in the vilest language and filthiest gestures to all who came near her. Finally she became a raving maniac, and was sent to an asylum, where death soon released her from her terrible sufferings.

The only cure for the affection is marriage, or amputation

of the clitoris, according to the plan recommended by Baker Brown, who has reported numerous cures by the operation. In this connection it may be well to mention that Dr. Brown incurred the enmity of his professional brethren for a too free use of the operation in this as well as allied affections, and was, I think, compelled to leave some of the London medical societies, of which he was a prominent member.

#### SATYRIASIS

Is an affection of the male, corresponding, in all its essential features, to nymphomania. It is a rarer form of disease than nymphomania, because the man can gratify his venereal sense with impunity, while a woman is put under a ban, and compelled to suppress her passions regardless of consequences to her nervous system. Satyriasis is not so often found among young men as nymphomania is among young women. It is more apt to occur in advanced years. The disease may arise from onanism, excessive sexual intercourse, cerebral affections, or the administration of poisonous doses of cantharides. Occasionally, continence is a cause of the disease. The case of Blandet is a good illustration of abstinence from sexual congress producing satyriasis. He was a missionary, earnest and full of zeal. His nature was intensely passionate, but he nevertheless kept himself free from every sexual vice. Finally, unable to endure the sight of the opposite sex without intense excitement, he secluded himself far from them. But absence only fanned the flame until he became satyriasic to an extraordinary degree. He was only cured by indulging his passion in a natural manner. Acton relates the case of a man advanced in years who was so much affected by the disease that he masturbated whenever females were in his society. The same au-

thor graphically describes another case : " He was young and in good circumstances, but was habitually untidy about his head and hair. His face was flushed, the cheeks and nose especially. His eyes were hollow, and had a haggard expression. The lips were thick and sensuous, the mouth wide. He was short and thick-set, and of a full habit of body. I never saw a case in which the animal was so prominent, although his intellect had not been altogether neglected. I learned that early in life he had masturbated himself, but had left off the practice only to commit excesses with women, of a nature and extent that were shocking to hear of."

Dr. Hammond relates the following : " This man has a wife and several beautiful children, and within the sanctity of his home, where he is always to be found during the evening, his precept and example are so noble and pure and good, that his influence is felt and praised by all of his many friends and admirers. But at stated periods, away from home, he is a holy terror to the biblical standard of those who have the promise of seeing God, an angel of mercy to the fast women whom he patronizes, and an insoluble enigma to all mankind. He has never been known to cohabit with a lewd woman, or to speak an immodest word ; but he is a liberal customer of certain houses of ill repute. His custom is to go early in the afternoon, select two or three of the largest girls in the house, and repair to a private room and lock the door. Here he divests himself of every stitch of clothing from the waist upwards, but never removes his trowsers or boots. Then, lying prostrate on the floor, with his arms lightly crossed over the abdomen and his hands tightly closed, he commands his companions to walk over his naked chest, neck and face, taking care to stop at each step to grind his flesh with the heels of

their boots. After this process has continued for some time, he begins to buy the wine for the girls to drink but religiously abstains from taking a drop himself.

"About the only noticeable interest he takes in the proceedings is an occasional demand for a heavier girl, or for some means by which they can increase the severity of the punishment. The tramping process goes on uninterruptedly for two or three hours, at the end of which time he will have ordered a dozen more bottles of wine, besides paying the fair trampers handsomely for their time and trouble.

"One of his diversions is to make one of the girls stand on his chest with her entire weight on one boot-heel, and have the other girls spin her around till his flesh is torn and bleeding. He will also frequently direct a girl to place one foot across his eyes, with the boot-heel resting in one orbit and the other foot resting across his throat. He will keep her in this position for five or ten minutes, thus sustaining a weight of one hundred and fifty pounds or more. It would be impossible to mention all the means of torture that this man has invented and submitted to, but I merely mention these few facts as being samples of dozens which I have heard of. At the conclusion of one of these matinees, our hero puts himself through a course of rubbing his injured spots with his naked hands ; and a very strange part of the story is the fact that by this simple process his bruises, scars, and ecchymoses will almost entirely disappear within a very few minutes. Having thus rubbed himself back to a state of presentability, he resumes his clothing, pays his bill, and takes himself off to the marts of trade, but only to return and repeat the strange entertainment in about a week."

"Another case, was a young man, a cigar dealer of this city, who from a very early period of his life had contracted the

habit of introducing substances into the anus for the purpose of having sexual pleasure. He had been led to the practice by seeing, while yet a very young child, a dog coupled with a bitch, and supposing that the connection was by the anus, he had inserted a wooden lead pencil into the corresponding opening of his own body. This had caused him some local pain but it had also produced a singular but voluptuous sensation the exact location of which he was not able to fix.

"At this time he was about seven years old. In a few days he repeated the operation with a like result, but on this occasion with the handle of a toothbrush well oiled. Again he experienced pleasure which was distinctly referable to the penis. After this he often performed this act, using always the same article with which to accomplish his purpose.

"At about the age of ten he was initiated into masturbation and pederasty by the boys of a boarding-school to which he was sent. Masturbation, however, gave him no pleasure, neither did pederasty when he was the active agent. Indeed he had difficulty in getting an erection sufficiently vigorous for the purpose. His weakness in this respect was soon discovered, and he was relieved from that part of the performance very much in accordance with his wishes, as the rôle of the passive gave him more pleasure than that of the active agent. Every night, therefore, he took part in these shameful performances and frequently to the extent of half a dozen or more times. On each occasion he experienced the voluptuous sensations to obtain which was rapidly becoming one of the chief objects of his life. He remained at the school five years, and then left it to go into a tobacco mercantile establishment to learn the business, but, as he said, with his health shattered, his nervous system irritable, with almost constant headaches, and with

such a degree of relaxation of the sphincter ani as to sometimes make it impossible for him to hold his feces after they had once reached the rectum.

"At this time he formed an association for pederastic purposes with a young man who was to take the active while he himself was to take the passive part. Articles of agreement were drawn up between them in which each swore eternal fidelity to the other, and in which they were called, respectively, husband and wife. They took a room together and at night slept in the one bed. There were two beds in the room and both were occupied for a few minutes so as not to excite suspicion, and then the one who was in this disgusting arrangement to act the part of the "husband" came to his "wife's" bed and remained there during the night. Generally pederasty was practiced night and morning.

"Frequently the passive agent would array himself in female attire and would sit up at night waiting for the other to return home—sometimes he was kept out late by business, which was that of a liquor dealer—and he would receive him with every demonstration of affection."

In the worse cases of satyriasis, the patient is indeed, a maniac. The delirium is of a violent character, and death may occur in a short time from convulsions or from suppurative inflammation of the genitals, the result of self-inflicted violence.

If the disease has a cerebral origin it is incurable. The other forms are sometimes amenable to treatment. Cold bathing, applications of ice to the sacrum, perineum, and genitals, with the internal administration of aconite, camphor, bromide of potassium, and other sedatives will often give relief. It is well also in these cases or in such cases as are of full habit, to em-

ploy severe antiphlogistic measures, even to a point where it reaches the line of danger. Nausea kept up for a few days by administration of a solution of antimony will be of benefit. And I would also recommend in addition to the antimony a few doses of any active cathartic, such as jalap or podophyllin, or elaterium. The application of the actual cautery to the back of the neck as high up as the occiput would be of service; if, as many think, the disease takes its origin in over excitation of the nerve fibres of the cerebellum, or some of the ganglia in the neighborhood, it should be one of the first things tried. Blisters and setons might also be used with benefit.

#### ASPERMATISM.

This affection is characterized by an absence of the orgasm and non-ejaculation of the seminal fluid during sexual intercourse. It is generally the result of masturbation commenced in early life, and discontinued at maturity to commence the more natural act of cohabitation. The inability to cohabit often exists, and the aspermatism comes on when the patient has had a surfeit of enjoyment. The power of erection remains intact, but the patient exerts himself in vain to produce an orgasm. This condition may continue for a couple of weeks, disappear, and then return. It is by no means a permanent condition, but it may lead to sterility and impotence. Some writers say that it is due to spasm of the orifices of the ejaculatory duct, which prevents the passage of the seminal fluid into the urethra; others, that it is due to a lack of secretion in the various glands. This latter view, however, is not tenable, because patients with aspermatism are subject to nocturnal pollutions as a result of lascivious dreams.

It is more than probable that there is a temporary paralysis

of sensation existing in the prostatic portion of the urethra, in the ducts, and perhaps in the vesicles. This lack of sensation prevents the reflex muscular action necessary for the propulsion of the semen.

Van Buren and Keyes mention cases which have no connection whatever with either sexual excess or masturbation. I have seen cases, in private practice, depending solely on self abuse. None of the patients were impotent. They were able to cohabit, without difficulty, but seldom enjoyed it because of the absence of a natural termination to the act. One of these patients was a married man, who, as a lad, abused himself. He was capable of keeping up connection for three-quarters of an hour at a time without an emission. At intervals, on other occasions, the emissions would take place at the commencement of the act. The lack of sensation during intercourse was not permanent. It would continue for three or four months, and at the end of that time the act would be natural and pleasurable. Electricity relieved this patient, but did not accomplish a perfect cure.

Acton terms this condition "non-emission," and thinks the principal cause is stricture of the urethra, and that the best treatment for it is to divide the stricture. But in the same chapter he has the following: "I met with a most singular case of this kind some time ago. The patient was an American. Erection was perfect, but emission did not follow. When erection ceased there was occasionally a slight oozing from the urethra. Strange to say, this patient had emissions at night, once or twice a week. The testicles were small. A short time before, he had been operated on for varicocele, without any good effect. He had also been cauterized. Slight stricture existed, as was ascertained by the bulbed instrument, but a

conical bougie passed easily. In this instance there was apparently nothing but a want of co-ordinate action between emission and erection, both being perfect at different times. The patient, under proper treatment, ultimately recovered."

I have obtained the best results from compelling the patient to abstain from intercourse, making daily applications of the Faradic current to the genitals in the method hereinafter described, and giving tonics into the composition of which the alkaloids of *nux vomica* enter largely.

#### STERILITY,

Or lack of power to propagate the species, is associated with impotence, although there are many other factors in its production besides lack of virility. Indeed, inability to copulate does not necessarily make the patient sterile. If the seminal fluid be merely left at the entrance to the vagina by a premature ejaculation, the spermatozoa may find their way to the uterus without much difficulty. As a proof of this, the numerous cases of impregnation occurring without intromission or rupture of the hymen are amply sufficient.

Sterility may also result from inflammatory occlusion of the ejaculatory ducts, arising from cauterization of the prostate portion of the urethra. Lallemand was accused of producing many cases of sterility by his method of cauterizing the urethra for spermatorrhœa,—perhaps, however, with little reason.

Inflammation of the epididymis will also cause it by occluding the seminal ducts and preventing the passage of the seminal fluid through them. Destruction of the testicles will, of course, produce incurable sterility.

Obesity or corpulence is mentioned by Carpenter as a factor in the production of sterility. "It must be observed that there

is a certain degree of antagonism between the nutritive and the generative functions, the one set being exercised at the expense of the other. The generative apparatus derives the materials of its operations through the nutritive system and is entirely dependent upon it for the continuance of its activity. If, therefore, the generative activity be excessive, it will necessarily draw off some portion of the aliment destined for the maintenance of the fabric at large. It may be universally observed that where the nutritive functions are particularly active in supporting the individual the reproductive system is in a corresponding degree undeveloped, and *vice versa.*"

That excessive corpulence tends to generative debility or sterility is brought almost daily under my notice. It is likewise becoming very well known amongst breeders of the finest stock. At the veterinary college I have had various opportunities of seeing this exemplified. It is noticed that sterility in bulls rarely occurs in the commoner sorts. Those that have been sent to the college, in consequence of not getting stock, are found to be the high-bred prize animals. This class is not prolific, the owners caring only to breed animals that produce fat readily. If we had the statistics of these high-bred cattle, we should find that the large prices obtained for them are fully warranted, as the sires and dams are anything but prolific, and the vulgar saying, "a lean dog for a bitch," is a terse but significant mode of enunciating a prominent fact.

"I was in conversation with a gentleman, a large farmer in Suffolk. He told me that he is often disappointed when he wishes to breed from cart-mares. This year, out of his own working stock of twenty-eight horses, eleven mares did not stand, greatly to his disappointment and loss, as a yearling colt is worth twenty pounds, and the mare ceases work only during

one month before and one month after parturition. This sterility he attributes to the high condition his cattle are kept in by the carters, who, proud of their teams, do not care to see them in foal. To obviate it fresh stallions have been purchased, and with as little success, sterility still prevailing. Among these eleven mares there were young as well as old ones, but none of them proved in foal.

“The treatment of cases of corpulence has within the last few years excited considerable attention, no doubt through the pamphlet of Mr. Banting, who, however, is indebted to Mr. Harvey, a member of our profession, for the plan he recommends. I have from the first strongly recommended the chief features of the system as beneficial for the general health, especially in the case of persons of corpulent tendency. No doubt can exist that abstinence from or extreme moderation in the use of fat, butter, milk, cream, bread, potatoes, sugar, and beer will in one week considerably diminish the weight, and in fat persons remove many uncomfortable sensations. When a patient is over stout the weight may be fairly and safely reduced one or two pounds weekly. I have often found such treatment assist the recovery of sexual power in persons in whom it has been failing. Abstinence has been proved to work equally well with animals, and I have heard of several instances of over-fat bulls that had become sterile, recovering their procreative powers after being sent to work on the farm upon less food.”

The treatment of sterility consists in removing the cause and improving the general health.

## CHAPTER VII.

### DISEASES OF THE GENITALS THAT ARISE FROM MASTURBATION AND SEXUAL EXCESS.

Causes of Varicocele—General changes in the Spermatic Veins—Effects of the Congestion and Dilatation of the Veins on the Neighboring Tissues—Mental Depression produced by Varicocele—Emissions and Impotence as a result—Ligation of Veins as a means of cure—Caustic Applications—Galvano-Cautery, etc.—Amputation of the Scrotum the only safe Operation—Ecchymosis of Scrotum—Neuralgia of the Testicle—Irritable Testicle—Various Methods of Treatment—Neuralgia of the Neck of the Bladder—Treatment—Spasm of the Muscles at the Neck of the Bladder as a cause of Impotence—Congestion and Inflammation of the Prostate Gland—Treatment.

Sir Astley Cooper once said : “ Varicocele should scarcely receive the title of a disease, for it produces in the greater number of cases no pain, no inconvenience, and no diminution of the virile power.” If that eminent surgeon lived at the present day and could see the cases that present themselves for treatment at the city dispensaries and hospitals, as well as those in private practice, he would be compelled to modify, if not change entirely the opinion quoted above. The fact is that while there are cases of the disease which seem to trouble the patient but little, the vast majority are accompanied by more or less general weakness, by relaxation, by nocturnal pollutions, and by great mental anxiety. Some of the old writers on the subject state that mental depression is the principal accompaniment of the disease. This is doubtless true of most cases of fully developed varicocele (*cirsocele*), but it is a ques-

tion whether the depression and anxiety are due to the previous bad habits of the patient or to the varicocele. The seminal weakness and the seminal losses, when they are present, sufficiently account for the mental trouble ; but these may, of course, be increased by the disease itself. The imagination of the patient is apt to exaggerate every abnormal change which takes place in the genital organs, no matter what importance may be attached to it by the surgeon.

Varicocele generally occurs on the left side. It consists in a varicose dilatation of the veins in the spermatic cord, and exists independently of varicose enlargement in the veins of the extremities or other parts of the body. Persons of advanced age frequently suffer from varicose veins of the lower extremities, without having any disease of the veins elsewhere. Young adults are particularly susceptible to varicocele, and rarely have any dilatation of the veins of the extremities. There seems to be no connection between the two diseases.

When varicocele exists in young persons it is a positive sign of some derangement of the genital organs, the result of masturbation or of sexual excess,— generally the former.

The dilatation occurs on the left side from a variety of causes. In the first place, the veins of the spermatic cord empty at right angles, on the left side, into the renal vein ; while on the right side the vein opens obliquely into the ascending vena cava, thus making it easier for the blood to ascend and gain the general circulation. Then, again, the pressure of impacted feces in the sigmoid flexure, which is apt to occur in all cases of constipation, will by the pressure exerted obstruct the circulation through the spermatic veins and thus assist in the production of varicocele, when there is any relaxation of the veins of the cord present. The extra length of the cord on the left

side has not, I think, much to do with the development of the disease.

As the spermatic veins dilate, they become engorged with blood. The circulation through them is retarded, and as a consequence the venous radicles which supply them are congested. The weight of the increased mass of blood, together with the retardation of the circulation of the blood (owing to the stagnation in the vessels) may retard the nutritive processes in the testicle so as to cause atrophy of the organ after a time. The congestion is not confined to the testicles involved, but soon extends to other parts, producing a marked irritability and excessive secretion from the glandular structure of the genitals, which are evidenced by the frequency of the spermatic discharges and the impaired virility. The nocturnal pollutions, if they do not appear before, are co-incident with the development of the varicose condition of the spermatic veins, and as the disease progresses there is more or less impairment of the copulative function.

Not long since a student of the medical department of the University consulted me about a varicocele, which had developed three years previously. He was a stout, hardy young man of twenty-two, of good habits, comparatively speaking, and one who had rarely been guilty of the habit of masturbating. The varicocele was, as is usually the case, on the left side. It was large, and seemed to envelop the testicle. The testicle seemed to be of normal size ; the penis showed no signs of misuse. He had nocturnal emissions as often as four times each week, and he was conscious of some impairment of virile power. These abnormal conditions made him exceedingly unhappy and despondent. He slept poorly, his appetite was bad, study was irksome, and he had little hope of any treat-

ment effecting a cure, because he had for the two years previous been taking, without benefit, every kind of quack nostrum he could find as well as orthodox medicine. A few days after I first saw him I made a natural suspensory badge for him by removing the lower and relaxed pendulous portion of the scrotum. The operation proved very beneficial. He improved rapidly after it, and, with other appropriate means, he completely recovered his health. Eighteen months after the operation he was free from his frequent emissions and his mental despondency had disappeared.

Many such cases have come under my notice during the past fifteen years, and in nearly all remarkable amelioration of all the symptoms was produced by amputation of the scrotum.

Some authorities think that varicocele is more often a cause of the disease, than an effect. The general relaxation of the bloodvessels, and the tendency to dilatation of veins, which exist as a result of masturbation, is likely to be localized in the spermatic veins of the left side, more than anywhere else.

There can be no doubt that the general relaxation of the bloodvessels with the tendency to a general dilatation of the veins, which exists as a result of excess and onanism, is one of the principal factors in the production of dilatation of the veins of the testicle and spermatic cord. The frequent erections and constant turgescence of the bloodvessels of the genitals must cause, finally, varicose enlargements on the side most readily predisposed to it. The irritability which is thus engendered increases the frequency of the emissions, adds to the mental distress, and may ultimately destroy the already impaired virility of the patient.

While I believe that a large majority of cases of varicocele result from masturbation and excessive sexual indulgence, yet

there are cases to which no such history can be attached, and where all the parts are otherwise healthy. These are always amenable to treatment, and are cured in a much shorter time than the others.

The treatment of varicocele should commence by removing the cause of the disease. If the patient's habits are the basic cause of the trouble, it will be of little use to attempt anything, unless these habits are abandoned. When that is done, he has taken the principal step towards recovery. The general health should first receive attention. The constipation, which is an invariable attendant of the disease, must be gradually removed, without the use of active cathartics (see treatment of spermatorrhœa and impotence). Cathartic medicines in ordinary use are apt to disorder the stomach and be followed by the same lethargic condition of the bowels which existed before.

Belladonna is a good remedy to try in all cases of constipation, where the patient cannot stand depletion. It is highly recommended by Bartholow, who advises half a grain of the extract in pill form at bedtime. The following combination, which is recommended by the same authority, and which I have myself employed extensively with excellent results, can be used in all the cases under consideration : R. Ext. belladonna, ext. nucis vomicæ, ext. physostigmatis,  $\text{aa. gr. iiij.}$  M. ft. pil. no.  $vj.$  Sig. One pill may be given at bed time. If, as sometimes happens with delicate people, this pill acts too severely, half may be given, or the pill may be given every other night. Sometimes the injection of a couple of ounces of sweet oil at night will produce an evacuation in the morning. Injections of cold water will also be of service (see page 225). Another excellent combination for the cure of habitual constipation, is a pill made of one quarter of a grain of nux vomica and the

same quantity of aloin. This pill, also, is to be taken at bed time.

Brisk rubbing of the abdomen, in the morning and evening, in addition to the general rubbing will also be of great value in promoting a healthy action of the bowels, and should never be omitted.

Cold baths stand at the head of the list of palliative measures in the treatment of varicocele. General and local bathing are both beneficial. The ordinary Sitz bath is the most efficient bath for local effects (See page 230 for methods of administering the bath).

Tonics, such as are advised in the treatment of spermatorrhœa and impotence at page 241, are also necessary.

A well fitting suspensory bandage should be worn constantly, unless the skin becomes much chafed, during walking or other exercise. In such a case it may be dispensed with during the sleeping hours, and a wet towel substituted. The towel should be wet in the center and so arranged that the wet part will envelope both sides or the whole of the scrotum, the dry ends to be carried up on each side, and fastened together, to a bandage under the waist. When the yet towel is worn in this way, the inflammation of the skin produced by the bandage worn during the day, will be relieved, allowing it to be worn again without much trouble the day following. Besides taking the place of the elastic suspensory at night, the water bandage relieves the overloaded veins and the internal congestion produced by them, and brings about a more healthy action in all the neighboring parts.

In the majority of the cases of varicocele, the palliative measures should be tried before any operative procedures are commenced. With regard to operations many are recommended,

from which the surgeon may choose, but there is only one operation on the list that I regard as free from danger, and that is amputation of the pendulous portion of the scrotum, and making a natural suspensory bandage, which by its regular and even pressure, will diminish the size of the dilated blood-vessels and relieve the congestion permanently. All the other operations are attended with danger; the patient may lose his life from any one of them, and, in view of the fact that the disease we are endeavoring to cure is never a cause of death, we have no right to perform an operation, attended with danger to life, especially when we have a comparatively simple one, which answers all purposes, and is perhaps more effectual than any of the others.

The operation for ligation of the veins, for the radical cure of varicocele, is apt to be followed by atrophy of the testicles, and in rare instances by the formation of thrombi, which are often carried to distant organs, producing great and sometimes fatal complications. Deplech, a French surgeon, was assassinated by a patient upon whom he had operated for varicocele, by ligating the veins of both sides. Atrophy of the testicles took place, and the enraged patient avenged himself by murdering the operator (Van Buren and Keyes.) Excision of the veins also has been performed, sometimes with beneficial results, at other times it has been marked by disaster and failure. Galvano-cautery, caustics, and injections, have also been tried, but they are open to the same objections as the rest.

Amputation of the scrotum, first recommended I believe by Sir Astley Cooper, has been performed by all the principal surgeons in this country many times during the past twenty years. It may be done with or without a clamp. It will be well for novices to use a clamp such as is advised by Sayre,

Levis, Henry and others. I have found the index finger and middle fingers of the left hand to answer very well. In using the clamp, care must be taken not to pinch the flaccid scrotum too tightly, as this sometimes retards the healing process, and produces sloughing, owing, I suppose, to the fact that some of the capillary bloodvessels in the flaps are destroyed by the pressure. In using the clamp, or my fingers, I usually draw down a fold of the pendulous scrotum so that the remaining portion of the scrotum is tightly placed over the testicles. It is better to have the covering too tight than too loose. If it is too tight at first, the elastic scrotum will stretch sufficiently to make the pressure right in the course of time. When a satisfactory amount of scrotal tissue has been included in the clamp, I pass a sufficient number of sutures through the scrotal walls behind and close to the clamp, so as to close the wound perfectly when the redundant tissue is removed. This maneuver saves time, prevents the retraction of the flaps, gives the operator perfect command of the bleeding edges, and greatly facilitates all the subsequent steps of the operation. When the threads are in place the pendulous portion is cut off close to the clamp with a sharp scissors or a scalpel. The clamp is then loosened, all the bleeding vessels secured, and the oozing prevented by the application of a dry towel, before the edges of the wound are drawn together by the sutures. If the bleeding is not stopped the hemorrhage may take place into the scrotal sac, distending it, and giving rise to a great deal of discomfort. To the novice, this effect is alarming. The scrotum is enormously distended and of a bluish black color, looking as if the whole mass were in a state of gangrene. Under such circumstances, the proper thing to do is to cut all the sutures, turn out all the clots, and tie or twist all the bleeding

vessels. Cloths dipped in ice water must then be kept on to prevent any capillary oozing or subsequent inflammatory action.

When the operation is concluded the scrotum should be covered with cloths wet with a cold carbolized solution, and these cloths should be kept constantly wet for the first week. Daily washing of the wounded surface is also necessary until there is perfect union.

When the patient is able to go about, which is usually at the end of two or three weeks, a suspensory bandage is necessary, and should be worn for several weeks, just as if no operation had been performed. This prevents any accidental stretching of the flaps, and controls the congestion until all the tissues are firm, and fixed, and the veins reduced to their normal size.

In many cases a period of ten or twelve years may pass before there is any appearance of a relapse, in others, however, the disease may begin again within five or six years. In these cases it will be generally found that the operation has been performed imperfectly, or that the patients have renewed habits, formerly discontinued, which have been destroying their health. Patients who, after the operation, remain temperate and enter the married state, rarely if ever have a return of the disease. Even late in life, in such cases, the veins as well as the scrotum are in a healthy condition.

#### NEURALGIA OF THE TESTICLES.

This distressing affection is frequently caused by onanism and sexual excess, and it is often accompanied by a loss of virility. It may also arise from malaria, rheumatism, strictures of the urethra, prostatic enlargement, and varicocele. In some instances it is a legacy of acute or chronic orchitis. The disease is rare among married men and others who are able to

fulfill their sexual functions in a temperate or reasonable manner. This fact shows the intimate relation which exists between neuralgia of the testicles and bad "sexual hygiene," and that the latter requires special consideration before the other exciting and predisposing causes.

The testicle in these cases is invariably tender on pressure while the attack is on. All muscular movements of the lower parts of the body, walking or climbing, or any exercise which allows contact or pressure of the limbs on the diseased organ will increase the pain. The pain is generally spasmoidic in character, either sharp or stinging, or a dull ache. The duration of the attack varies as in other forms of neuralgia, sometimes lasting but a few moments, then again continuing for hours with a greater or less degree of severity. During the attack the patient is weak and pallid, perspires profusely, and sometimes vomits. The slightest touch increases the paroxysm. In bad cases the patient's life soon becomes a burden to him, and he will often endeavor to persuade the surgeon to remove the organ without delay, and before any other method of treatment has been employed.

If the testicle is swollen the emissions are generally frequent. Though the patient may be full of erotic fancies, he rarely attempts sexual congress because of the aggravation of the pain usually caused by such attempts. Curling mentions the case of a man, a patient of his, who was unable to cohabit with his wife owing to the excessive pain which came on at the time, and was often so great as to cause fainting.

#### IRRITABLE TESTICLE

Is nothing but a mild form of neuralgia of the testicle. It is seldom accompanied by severe paroxysms. It may affect both

testicles, and is more apt to affect the testicles of both sides at the same time than one alone. If the testicle is carefully examined, one or more sore spots will be found exquisitely tender on pressure. The tenderness is present to a greater or less extent during the continuance of the disease, though with it also there are paroxysms of pain, especially after much excitement of the genitals, from masturbating or intercourse. The affection like the preceding one is generally due to bad sexual hygiene, or to excess of one kind or another. "Temporary irritable testis may be produced in a healthy person, at any time, by prolonged sexual excitement, ungratified. Masturbators, who have suddenly reformed, and recent widowers, and those who have abused their sexual power by over use, are liable to the affection." (Van Buren and Keyes.)

In some instances the disease follows injury and inflammation in anæmic persons.

Romberg relates the case of a young man who developed an irritable testicle shortly after being engaged to be married, the result of ungratified sexual excitement. He prevailed upon the doctor to remove the diseased testicle. He was relieved for eight days, when the disease attacked the remaining testicle. He concluded to get married, rather than repeat the operation. The marriage cured him completely.

The general treatment directed in the beginning of the chapter to regulate the various secretions and build up the tissue making powers of the patient are all indicated here. When this has been done, and the habits of the patient are mended, local treatment will be found necessary. Indeed it may be commenced first; for the relief of the pain and soreness, either very cold or very hot applications are beneficial. I have found that the cold applications accomplished more than the hot,

though both are serviceable. A bladder filled with ice can be applied over the painful testicle, and retained there until relief is experienced. If the patient is very sensitive to the cold, a towel may be placed between the integument and the ice bag, or cloths dipped in ice water may be used instead of the ice. One of the best things, however, that I have found for neuralgia of the testicle is the cold sitz bath. It should be taken every night, whether the neuralgia is present or not, and also during the time the paroxysm of pain is present. The patient may remain in the bath from five to fifteen minutes, the length of time depending of course on the feelings of the patient, and his general condition. One case of severe neuralgia of the testicle in an impotent middle aged man, was entirely cured by these baths alone. He experienced so much relief from the first bath that he would take no other treatment, and his recovery was complete as well as rapid.

During the day a well fitting suspensory bandage should be worn, and the pantaloons should be as loose as possible, so as not to interfere with the circulation through the vessels of the spermatic cord on either side. I am convinced that much harm is often done by the absurd practice of tightening the garment on the "dress" side. The practice not only obstructs the circulation sufficiently to aggravate all diseases of the genitals, but I think it is a prominent factor in the causation of varicocele and the various forms of neuralgia incident to a rapid life about town.

Puncturing the integument over the spermatic cord with needles is sometimes beneficial. It may be advisable, in very bad cases, to rub into the punctures a mixture of equal parts of croton oil and olive oil. This application must be made over the upper part of the scrotum, and over a surface corres-

ponding to the width of the cord. It should not be continued down over the testicle.

The Faradic current will also be found of use in many cases. The positive pole may be applied over the genito-spinal center, at the junction of the last lumbar with the dorsal vertebra, and the negative electrode is then to be passed slowly upwards and downwards over the scrotum on the affected side. I have had no experience with the continuous current in the treatment of these cases, but by many authorities it is said to exercise a curative effect.

The application of local anodynes and sedatives will be of some service as palliatives. Among the best combinations are the ordinary lead and opium wash (Lotio Plumbi et Opii) the ointment of opium and belladonna, *papia fia*, belladonna plaster, and the ordinary porous plaster. I have found the following mixture to be among the best :

R.	Tinct. Aconiti	.	.	.	.	3 i.
	Tinct. Belladonnæ	.	.	.	.	3 ii.
	Acidi Carbolici	.	.	.	.	3 i.
	Spt. Vini Rectif.	.	.	.	.	3 iii.

Wet a cloth with the lotion, and keep constantly moist during the paroxysm.

Another mixture of the same nature, such as the following is good :

R.	Ol. Olivæ	.	.	.	.	3 ii.
	Liq. Potassæ	.	.	.	.	3 ss.
	Tinct. Opii	.	.	.	.	3 ii.
	Tinct. Aconiti Rad.	.	.	.	.	3 ss.

M. Shake well.

It is to be rubbed in gently over the scrotum of the inflamed side, two or three times each day.

Quinine in doses of from five to fifteen grains daily is often of benefit, especially if the patient is the subject of any malarial tendency. In tonic doses it is good at all times. When the baths, or the ice, or the anodynes fail to relieve the pain, opium or chloral or the bromides must be resorted to. Morphia may be given hypodermically or by the mouth. Some advise it to be given endermically, after the skin has been blistered. There is no special objection to this method of administering the morphia.

Castration has been recommended by some for inveterate cases, but every other means should have a prolonged trial first. Extreme measures should never be thought of until everything else has failed.

It is always well to advise marriage when the patient is young and suffering from bad sexual hygiene. This recommendation must, of course, be governed by the condition of the general health. He must be toned up to a certain point before the marriage can be consummated. (See page 241.) If the patient is full blooded, and his neuralgia is simply the result of unsatisfied longings, then no time need be wasted in preparatory treatment. He can be married without delay.

#### NEURALGIA OF THE NECK OF THE BLADDER

Is another affection which very often arises from onanism and excessive venery. It is sometimes also caused by prolonged continence. It occurs also as a result of gout, rheumatism, malaria, and as a sequel to inflammatory conditions of the prostate gland, bladder, and urethra, and from stricture. Even when these disorders are accompanied by irritability of the neck of the bladder, there is probably some bad sexual hygiene at the bottom of it.

The constant distension of the prostatic ducts and the seminal ducts and the congestion which invariably attends the orgasm, soon produce a chronic congestion in the prostatic urethra, which in nervous subjects, or in persons with a neuralgic tendency produces irritability of the neck of the bladder and intense pain. The affection known as irritability of the neck, is like irritability of the testicle, only a modified form of the neuralgia, and by most authorities the terms are synonymous. Whatever may be the cause, the symptoms are characteristic. The patient is frequently seized with a desire to pass water. The evacuation of the bladder is attended with pain of more or less degree of severity. The pain is felt with greatest intensity at the neck, but it also extends to the thighs, and radiates over the perineum to the anus, around which part all the muscles seem to be in a state of painful contraction or cramp. The pain on micturition is much aggravated, if the urine contains an excess of oxalate of lime, or uric acid. The minute crystals irritate the nerve filaments and increase the pain. There are cases recorded where the presence of these ingredients in excessive quantity produced the neuralgia or irritability, and when they were removed by appropriate treatment the pain also disappeared.

In neuralgia the frequent calls to urinate occur more often during the day than during the night. In inflammation the calls to urinate occur at night as well as by day. This is an important point in diagnosis, though the examination of the urine alone will determine the point. The urine of cystitis always contains pus and triple phosphates, in excess. In simple neuralgia these elements are never present in any appreciable quantity.

With the neuralgia, there is more or less hypochondriasis.

Mental depression, deep but not lasting, accompanies all the attacks. This arises, undoubtedly, as much from the previous excess as it does from the pain, and is only part of the general weakness which follows all sexual excesses of every kind and nature.

Impotence and spermatorrhœa are often present and should be considered in all cases.

The passage of the sound into the bladder in one of these cases is attended with some difficulty on account of the extreme sensibility existing along the whole urethra, but especially at the prostatic part of the urethra. The spasmodic contraction of the muscular fibres around the instrument is often so great as to prevent, for a few moments, the entrance of the sound, and to give the impression that a stricture of an organic nature exists. If the sound is allowed to remain awhile, the spasmodic contraction passes away and with it all the pain, and when the sound is withdrawn great relief is generally experienced by the patient. If the pain arose from inflammation it would be intensified by the pressure of the instrument.

The first object to be attained in the treatment of irritability or neuralgia of the neck of the bladder, is to diminish as much as possible the local causes of irritation. If the urine contains an excess of acids, alkalies should be given—if it is too alkaline, acids are indicated. A selection should be made from the various tonics advised in Chapter XIV, and careful and well regulated measures should be taken to keep all the sewerage of the body clear and in perfect working order, so that there shall be no undue accumulation of excrementitious material at any one point, or in any one organ. With the cathartic medicines and the baths spoken of previously this end can be attained.

The daily passage of a full sized steel sound is advanta-

geous in almost every case, and should never be omitted except in those rare cases where the neuralgia depends on well developed inflammation. In such cases, of course, much harm might result from the passage of the instrument. If the sound causes pain and fainting, two or three days may be allowed to elapse before it is again introduced.

Cold sitz baths should never be dispensed with unless there is some special contra-indication for their use. During the paroxysm a hot sitz bath will sometimes answer better than the cold, but for general treatment the cold bath should be used. When insomnia is present, in connection with great depression, suppositories are beneficial ; both in relieving the irritability and promoting sleep, the following are excellent :

Ex. Belladonnæ	.	.	.	.	.	.	gr. ii.
Pulv. Opii.	.	.	.	.	.	.	gr. iv.
Quiniæ Sulph.	.	.	.	.	.	.	gr. xx.

M.

Make four suppositories, one to be passed into the rectum at bedtime.

Electricity is another agent of great value in neuralgia of the neck. The negative electrode to be introduced down to the neck of the bladder, and the positive to be applied over the sacrum and perineum. The séance should not last over five minutes at first. In the course of a week or two it may be extended to ten minutes. The Faradic current helps to diminish the pain, and it also diminishes the number of seminal emissions, an important point to remember in all these cases ; for while the ejaculations are in excess, the mental condition of the patient will be much disturbed.

Good food, and exercise out of doors, should, of course, be advised in every case, as well as total abstinence from spiritu-

ous liquors and tobacco. By careful attention to all these points the disease can always be cured. Opium, chloral, and remedies of a like nature, should be given, as in other forms of neuralgia, when milder measures for relieving pain fail.

#### SPASM OF MUSCLES CONNECTED WITH ERECTION.

During the act of micturition, and the ejaculation of seminal fluid, there often occurs spasmodic contraction of the compressor urethra and accelerator urinæ, which is very perceptible to the patient, and is often a cause of much annoyance, especially when, as it often does, it interferes with intercourse. The following case illustrates the class of cases to which I refer, and which has not as yet received any notice in any volume that I am acquainted with.

A. V., a native of Canada, by occupation a carpenter, applied for treatment at a clinic in the medical department of the University of New York, where I was then lecturing. He said that he had been married three months, and had considerable trouble in effecting sexual intercourse. He had perfect erections, but in the midst of the act a severe throbbing of the muscles of the perineum would occur, and cause the erection to cease; and this would occur often before an ejaculation of semen occurred. At times the spasmodic contraction would bring about premature orgasm, and expulsion of semen, which prevented all further efforts in that direction. This rendered him, for the time being, impotent, and distressed him in every way. He acknowledged that in early life he had masturbated considerably, and had also cohabited with women. Before his marriage the difficulty complained of only occurred at rare intervals; now it was almost a constant attendant of the attempt. Sometimes he was able to diminish the effect of the spasm by pressing with

the fingers of the one hand firmly on the center of the perineum, maintaining the pressure until the occurrence of the orgasm. I passed a full-sized sound and found great tenderness all along the canal, but especially at the prostatic portion of the bladder. As the sound entered this portion of the canal the spasm again occurred, and the patient said he felt like having an emission or emptying his bladder. I advised sitz baths and the Faradic current, and abstinence from all sexual pleasures, and in a few weeks the act was unattended by the spasmodic contraction.

I have seen several others who have endured great inconvenience from this form of spasm, but it was entirely unconnected with painful symptoms of any kind. Electricity is the best thing for it, but most cases require the full course of treatment for spermatorrhœa and impotence, recommended in another portion of this volume.

#### CONGESTION AND INFLAMMATION OF THE PROSTATE.

The tumefaction in the prostatic region of the urethra, previously spoken of as a result of onanism and excessive venery, if continued when it exists for any great length of time, may sooner or later involve the whole prostate gland. The blood-vessels all through the gland become engorged, the prostatic secretion is for the time being increased, and the organ is larger, more tense and more tender than in health. As a consequence there is a feeling of uneasiness at the neck of the bladder and more frequent calls to urinate, and there is also an escape at frequent intervals, after the last drops of water have passed, of a small quantity of prostatic fluid. This secretion is sometimes clear, but in many of the cases the secretion is opaque from the admixture of epithelial cells and pus, and

in rare instances by semen. The patient experiences an unpleasant sense of distension in the perineum and around the anus and a disagreeable sensation as if something was held back at the congested point that ought to be expelled. The patient is nervous and anxious, sleeps poorly at night and feels in a despondent mood most of the time. If the disease is associated with a gonorrhœa, as it sometimes is, the resulting gleety discharge will continue for a much longer period.

I have under treatment at the present time a clergyman suffering from congestive trouble, the result of malaria and continence—more of the latter than the former. He did the work of a large parish, and suffered occasionally from chills and fever, and at various intervals he had some distress in making water. The act of urination was associated with powerful erections, painful in the extreme, which continued long after the bladder was emptied. He experienced no relief from emptying the bladder. The painful erections and the pain during micturition were always aggravated during the malarial attack, but they also occurred at various intervals when the malaria was absent. The tension at the neck of the bladder and the painful erections became so persistent that he was forced to come to the city for advice and give up his active parish work. I might here remark that he denied having any desire to copulate or any erotic feelings of a similar nature. There was no evidence of any kind to show that he had ever abused himself in any way. When I examined him, I found an exceedingly sensitive prostatic urethra, some tenderness in the perineum. The passage of the sound was followed by a viscid opaque secretion and an erection. There had been no other discharge before to his knowledge except a clear one, transparent and sticky. He was very despondent

about his condition, and thought it would be impossible for him ever to perform his regular duties again. He was put to bed, his bowels were freely moved and hot poultices were placed over the perineum, and he was also ordered hot sitz baths by the house surgeon. These measures, to a great extent, relieved the unpleasant sensations in making water, but his erections still continued with great force and frequency, and they were the most annoying part of his disease. He was then ordered large doses of bromide of potassium, and allowed to get up. The hot baths were exchanged for cold ones, and in a short time the erections ceased to be of more than ordinary annoyance.

This congestion of the prostate may terminate in acute inflammation under increased excitement, or it may run a slow course and terminate in hypertrophy of the gland. A sound introduced into the canal will occasion great pain and a desire to urinate. After the urination the distress still remains to a greater or less degree. The introduction of the finger into the rectum will show that the gland is more sensitive to pressure than it ought to be, and that firm pressure will give pain and at the next urination will produce the expulsion of the prostatic secretion in considerable quantities.

As before stated, if the congestion of the prostate continues for any great length of time a condition of acute inflammation may arise. This occurs sometimes in the course of an ordinary congestion by one night's dissipation with women. The patient may have some chilly sensations preceding the attack, but these are often absent. There is, with or without the chilly sensations, deep-seated pain in the perineum extending towards the anus; pain on pressure over the pubis and perineum, and frequent desire to micturate. Every time the act

is performed there is sharp pain that lasts after the bladder is empty. The aggravation of the pain is due to the fact that muscular fibres of the prostate are thrown into strong contraction in expelling the water during micturition, and the pressure and pulling of these muscular fibres on the inflamed tissue must necessarily give rise to a great deal of pain. The gland becomes very much enlarged, and can be felt to bulge into the rectum. The pressure of the finger in that organ occasions great pain, and with the finger the dimensions of the organ can readily be ascertained. The introduction of the finger will determine at once the character of the disease, so that it need not be confounded with cystitis, the only disease it is liable to be mistaken for. There is no tenderness in the rectum over the prostate in cystitis. In prostatitis, as also in cystitis, there is frequent desire to micturate and pain during the act, but in cystitis there is always much more pus and mucus in the urine than there is in prostatitis. Besides this, in cystitis there is always a larger quantity of the triple phosphates. Phosphates are never absent in decomposing urine in or out of the bladder, but are not present in prostatitis.

The swelling of the inflamed prostate may be so great as to produce retention. This is more apt to occur when the disease arises from an extension of gonorrhœal inflammation or from traumatism. Retention is a very rare occurrence in ordinary prostatitis. With the local symptoms the patient has also more or less febrile excitement. The bowels are apt to be constipated, the stomach is disordered and the skin is dry and hot. The patient is distressed in mind and exceedingly despondent. He frets, he worries about his condition more than the severity of the affection would warrant, and this is specially so in those cases which are entirely due to sexual excess or

onanism. Prostatitis, whether follicular or parenchymatous (and I think one rarely occurs without the other), will generally terminate favorably under proper treatment. It rarely ends in suppuration. The worst result to be apprehended is a permanent enlargement or hypertrophy of the gland. The inflammation usually lasts from one to three weeks. The duration, of course, depending on the cause of the disease and the general condition of the patient.

The best way to deplete the vessels of the prostate gland is to apply four or five leeches to the margin of the anus. The branches of the hemorrhoidal plexus are in direct communication with the dense prostatic plexus, and the result of the abstraction of blood there is to diminish in a marked degree the amount of blood in the gland mentioned. Unless the patient is exceedingly sensitive and nervous they should be applied without delay. After the leeches have done their work a saline cathartic in small but often repeated doses should be given. A mixture containing half an ounce of Epsom salts and half an ounce of bi-tartrate of potash, to half a pint of water, can be given in wineglassful doses, every two hours, until free evacuations are produced. Of course, in anæmic persons the cathartic and the leeches may be omitted. Hot linseed meal poultices applied over the perineum and hypogastric region, and changed every two or three hours, will afford great relief to the patient.

Diluents should be given freely. An infusion of the triticum repens, hops, linseed or barley, will answer all purposes and keep the urine in an unirritating state. The triticum repens, or common couch grass, was first recommended by Sir Henry Thompson for cystitis and prostatitis, and it is undoubtedly of great use and value in all painful inflammatory affections of the

genital organs. Dr. Thompson gives its preparation as follows : "Take two ounces of the underground stem, add it to one pint of water and boil for one quarter of an hour, the strained liquor to be taken by the patient in four doses in the twenty-four hours. An infusion of *alchimella arvensis* may be given in the same way in doses of from an ounce to an ounce and a half every three or four hours. Liquor potassæ and hyoscyamus in combination, though incompatible, often afford great relief to the pain in cystitis. Chloral in ten or fifteen grain doses at bed time will be of service in some cases in relieving pain and producing sleep."

Hot sitz baths are also employed with benefit in these cases. They may be used twice each day, unless they seem to debilitate the patient or disagree with him in some other way.

## CHAPTER VIII.

### DISEASES OF THE GENITALS ASSOCIATED WITH SPERMATORRHOEA AND IMPOTENCE.

Accumulation of Secretions under a tight Prepuce as a Cause of Spermatorrhœa and Impotence—Illustrative Cases—Reflex Irritation Produced by Phimosis—Loss of Voice from Phimosis cured by Operation—Sayre's unique Case—General Treatment—Congestion of the Prostate and Inflammation of the Prostate—Cases of Spermatorrhœa and Impotence Produced by Them—Impotence following the Removal of Calculi from the Bladder by the lateral Operation—Spermatorrhœa produced by Hypospadias and Epispadias—Curvature of Penis—Large Penis—Prostatic Calculi as a cause of Spermatorrhœa.

#### PHIMOSIS.

When the prepuce is elongated and contracted in front of the glans-penis, the secretion of the sebaceous follicles accumulates on the glans and behind the corona. At first the secretion is thin and cheesy in character, but after a time the accumulation becomes dry and hard, forming a concrete mass on the sensitive mucous covering of the glans. This mucous membrane is perhaps the most sensitive in the human body; it is certainly the most sensitive portion of the mucous lining of the genitals. Hence any irritation of this membrane is liable to be followed by many varied reflex phenomena, which often baffle the skill of the most experienced. In children this collection of sebaceous matter will produce incontinence of urine, a tendency to handle the parts and to masturbate, and it will sometimes cause paralysis. In adults the reflex irritation

is excited in the seminal vesicles and ejaculatory apparatus, and produces numerous losses of seminal fluid. If the concretion around the glans has existed long enough to produce inflammation of the mucous covering, the pain will prevent intercourse and thus render the patient temporarily impotent.

But the effects of these accumulations of sebaceous matter resulting from phimosis are not entirely local. The most distant organs are likewise affected by the reflex irritation. Dr. Durant of this city sent me a patient twelve months since, who afforded an excellent illustration of the fact just stated. The patient was a young clergyman of good habits and temperate in all things. For several years he had been subject to a troublesome affection of the throat which interfered with his ministerial duties. Some minutes elapsed on entering the pulpit before he could make his voice heard in distant parts of the church. He had been treated for pharyngitis, laryngitis, etc., without relief. Local applications as well as constitutional remedies failed. For several years he suffered severe pain while cohabiting with his wife. He commenced the act with regret and ended it in agony. The pain was always referred to the head of the penis. Latterly he had ceased intercourse on account of the pain, and he was consequently troubled with seminal emissions three or four times each week. On examining the penis I found the prepuce contracted tightly in front of the glans. It was exceedingly painful on pressure and it was impossible to push it back.

The next day the patient was placed under the influence of an anæsthetic. I removed the prepuce and exposed the glans. The whole surface of the mucous membrane from the corona glandis to within a quarter of an inch from the meatus, was covered by a hard thick coating of a mortar-like material.

which was removed with great difficulty. In some places near the corona it produced ulceration by its pressure. After the removal of this concrete substance the operation was concluded in the usual way. The ulcers were dressed with lint steeped in olive oil. This was the only dressing employed during the whole course of treatment. In ten days the ulcers as well as the wound had completely healed.

When the patient again entered the pulpit he found, much to his surprise, that the aphonia as well as other disagreeable laryngeal symptoms had disappeared, and that he had full command over his voice. Though more than a year has elapsed since the operation his voice has remained perfectly clear, and there has been no return of the affection. There was also complete relief from pain and other unpleasant sensations during sexual intercourse.

Dr. Sayre relates the following interesting case occurring in a boy  $3\frac{1}{2}$  years old: "Has frequently through the day what the mother terms 'spasms of ecstasy,' in which he laughs immoderately, and his eyes are bright and glistening, but yet he apparently sees no object, and the penis is in a state of extreme erection. Cannot see, although eyes have been examined and found sound. Unable to stand; incapable of voluntarily contracting any of his muscles when standing, or rather when being held in the upright posture, as it was impossible for him to stand, but when lying on his back for some time can move his hands and turn over; but when held upright his legs always spasmically cross each other, hands close, wrists flex, elbows the same, in fact, all the adductor and flexor muscles act and produce a strange distortion; the mouth opens, and there is a vacant stare of idiocy with a curious laugh of half intelligence. The penis is in a state of almost constant erec-

tion, and greatly excited at the least irritation. The meatus is red and tender. Teeth nearly all destroyed by medicine, and is now nourished on a bottle." Phimosis, firmly adherent prepuce. Dr. Sayre circumcised him on the spot, and at the next visit the child shook hands with him, which he had never done before in his life. Considerable improvement is said to have followed, but not a cure, as about eight months afterwards "it could not hold its head up with the strength of the normal child, although it could sit down and get up and stand, balancing itself without assistance ; could speak several words, and had acquired the power of eating."

Lallemand relates several interesting cases of spermatorrhœa which were caused by phimosis and accumulation of sebaceous matter under the prepuce. They are exceedingly interesting :

"A peasant consulted me for his son aged fifteen, who for two years had experienced a constantly increasing paralysis of the lower extremities. On his sides and loins were marks of numerous ulcers which had been tried during two years. Large excoriations had formed on the sacrum and trochanters. On examining the genital organs, I noticed that the prepuce was very narrow ; and on pressing it to get rid of the sebaceous matter which presented at its orifice, the penis became erect. I learned from the parents that this boy had erections at the age of eight, and that at nine years of age, he had been found attempting coitus. The boy himself admitted that the itching with which he was tormented led him to rub the genital organs, and thus induced maneuvers which he has since continued.

"The first symptom that presented itself was frequent desire of micturition, and this was followed in about a year by complete incontinence of urine. In the course of the second year.

the patient's legs grew weak ; he lost his intellectual capacity, digestion became disordered, diarrhœa came on ; and the discharge of urine and feces caused excoriation of the skin. Salt and aromatic baths, tonics, excitants, etc., had been just as useless as issues. The cause of the disease was unsuspected. Masturbation had become very rare, but the urine was thick, muddy, and very fetid—so much mucus was passed, that I was unable to make sure of its containing semen—but the patient had constant pollutions at stool. I first performed ablation of the prepuce, and eight days after, I cauterized the bladder and surface of the prostate. A month afterwards, the urine was perfectly transparent, and presented a healthy appearance ; it was no longer passed involuntarily. Sensibility of the skin of the lower extremities had returned. Improvement was here arrested, however, and I lost sight of the patient."

"Another case, at twenty-three, of nervous temperament, having enjoyed good health up to the period of puberty, from that time presented a yellow and leaden appearance, with sunken eyes, forehead covered with acne punctata, and timid manners. For a long time he had appeared as if plunged into deep melancholy, and constantly sought solitude. He was restless, but was unable to bear fatigue. Digestion was difficult, and his intellect dull. This disorder had lasted four or five years, but had increased sensibly during the last year before M. B—came to consult me. I suspected him of bad habits, but he assured me that he had escaped them from want of desire, and that he had never had sexual intercourse. From the period of puberty, however, he had been subject to nocturnal pollutions, the frequency and abundance of which had progressively increased, and in spite of the means generally recommended in such cases, pollutions occurred every night, and sometimes

two or three times during the night. He had never noticed ascarides in his feces, nor experienced itching at the anus. I was uncertain to what cause to attribute these pollutions, when, on examining the genital organs, I noticed that the opening of the prepuce was very narrow, and that abundance of sebaceous matter escaped. Pressure made from behind forwards produced the discharge of a large quantity of matter of a milky appearance and considerable fetor. I concluded, therefore, that the natural phimosis, by preventing the discharge of the sebaceous secretion, was the cause of involuntary discharges, and in consequence recommended circumcision, which was performed immedately. I found a large quantity of sebaceous matter resembling soft cheese in color and consistence, and of a very disagreeable smell, covering the surface of the glans, and especially collected around the corona glandis.

“ The glans itself was vividly red, almost entirely deprived of its epithelium, extremely sensitive—the least friction causing a discharge of blood.

“ From this moment he passed a fortnight at a time, and sometimes longer without having nocturnal pollutions, which afterwards only arose from spermatic plethora. A rapid change took place in health and habits, so that at the end of a month he was scarcely recognizable.”

“ M. J.B., of Amsterdam, of delicate constitution and lymphatic temperament was subject during childhood to incontinence of urine, and always suffered from frequent desire to make water. About the age of ten, a whitish matter formed, and was discharged from underneath the prepuce, after which erections occurred, and were soon followed by emissions : a very disagreeable smell accompanied the preputial discharge. The seminal discharges increased as the patient's passions were

roused, and he grew sad, silent, discontented, and constantly occupied with the origin of his disorder. He imagined that the whitish discharges arose from venereal disease, although he had never had connection. His health became much disordered, and at the age of nineteen he mentioned his condition to his medical attendant. Lotions were prescribed, which removed the sebaceous matter and produced considerable improvement in the patient's health. M. B.'s bowels became constipated, however, and he perceived that he passed semen while at stool, in consequence of the effort necessary. The nocturnal pollutions diminished in frequency but still occurred occasionally.

"When M. J. B. consulted me in November, 1836, he presented the following conditions : Small stature, limbs slight and chest narrow, skin fair and soft, hair white and thin, face very pale, manner timid and embarrassed, hesitation, habit of stammering, arising from disorder in the intellect and loss of the memory, genitals remarkably small, penis small and short, hidden among long scanty white hairs, prepuce very long, forming numerous folds in front of the glans, surface of the glans covered by a thin layer of sebaceous matter, notwithstanding the utmost cleanliness on the part of the patient, scrotum compressed and much folded, containing only the right testicle, about the size of an almond, the left being felt in the inguinal canal attached to a portion of omentum. No spinal curvature (which the patient had feared,) his mistake arising from the projection of the hips and pelvis which resembled those of a woman. I removed the prepuce entirely in order to put an end to the influence of the sebaceous matter on the glans ; catheterism not giving much pain, I did not consider cauterization necessary ; but in order to give tone to the organs I left a catheter in the bladder for an hour or two at a time once a week, and ordered

the free use of cold douches to combat the constipation. The patient's temperament being exceedingly lymphatic, I afterwards prescribed three or four aromatic baths weekly, with the habitual use of spa water.

"These means lengthened the periods between the pollutions, diminished the constipation, and lessened the involuntary discharges that took place when efforts at stool were considerable. Acupuncture of the perineum and prostate produced more rapid and decided effects. After this had been practiced, sixteen days passed without nocturnal pollutions, and the efforts at stool did not cause any seminal discharge. By degrees the patient's face became more healthy looking and animated, and his strength and energy returned; his character regained its boldness and gayety, erections became frequent and energetic, and his health altogether having become as good as could be desired, M. B. returned to his home."

There can be no possible doubt that a tight elongated prepuce is provocative of masturbation. The irritating secretions cause the child to finger his genitals when no persons are observing. That habit once commenced soon culminates in self-pollution. Circumcision is therefore a sanitary operation in all cases when phimosis exists. The earlier the operation is performed the better. The child's prospects of remaining free from a debasing and debilitating habit will thus be materially enhanced

#### CHRONIC INFLAMMATION OF THE PROSTATE.

Many cases of chronic prostatitis occur independently of sexual excess or masturbation. Prostatitis may run its entire course without loss of virility, or abnormal ejaculations of semen, yet cases are sufficiently numerous where the disease has pro-

duced serious forms of spermatorrhœa and impotence, to authorize a careful examination of them. The irritation which the disease excites in and around the prostate gland and the neck of the bladder, as well as in neighboring tissues, must necessarily affect to a greater or less degree, the seminal apparatus. The irritation, arising from the chronic distension of the blood-vessels of the gland and prostatic urethra as a consequence of the inflammation, acts in a similar way to the irritation excited by sexual excesses or masturbation, and is often followed by the same results, viz: frequent seminal losses, and a subsequent loss of virility. The following case in my own practice illustrates this point :

H. G., æt. thirty-five, contracted a gonorrhœa five years previous to admission to the hospital. The discharge lasted six months. Afterwards there was a dull pain felt at the time of micturition, which continued a few moments after making water. At night there was a frequent desire to micturate, accompanied with constant pain.

At the end of a year the pain and frequent desire to micturate had diminished somewhat, but he was troubled with nocturnal emissions. They occurred three or four times each week and weakened him very much. At stool he said he sometimes passed semen. This of course is doubtful. It was probably nothing more than the secretion of the inflamed prostate with the addition of the secretion of Cowper's glands. He was less able to have intercourse, to perform the act. The erections were feeble and his ejaculations were premature. An examination of the urine showed the presence of a stringy mucus and a few pus cells. Its odor and reaction were normal. An examination per rectum revealed the fact that the prostate was considerably enlarged, and tender on pressure, and some pain was pro-

duced by the examination, which continued some time after the removal of the finger. The next act of urination also gave more pain than usual. So far as I could ascertain, there was no inflammation of the bladder.

He was placed on an infusion of *triticum repens*, and quinine, and ordered to take two Turkish baths per week. At the end of six weeks I prescribed a weak solution of iodine to be painted over the perineum every other day, and made him empty his bowels every morning by means of a cold water injection. He also took a cold sitz bath just before retiring, and had a brisk rubbing with a flesh brush. At the end of three months though the prostate was still enlarged, there was little or no pain, the frequent acts of micturition had ceased and his erections were as healthy as they were before the inflammation commenced.

Another case of a similar nature came under my care last winter. The patient was employed as a porter in a dry goods store. He was over forty, and said he had never abused himself in any way, and only indulged in sexual intercourse at rare intervals.

Twelve years before coming to consult me he contracted a clap, from which he recovered after six weeks' treatment. A year ago he again contracted the disease, and this time was not so fortunate, for the running continued for three months with little abatement. About a month after it had ceased, he began to experience unpleasant sensations at the neck of the bladder during and after micturition, and the desire to pass water was frequent and urgent. There was also some discomfort at stool. As the fecal matter passed through the rectum, over the prostate, a whitish liquid escaped from the urethra. He considered this to be seminal fluid, because about this time he began

to have painful erections and nocturnal emissions. The emissions occurred about four times each week, though he would sometimes, for a whole week, have one every night. Their effect was very depressing ; he lost appetite, became thin, and had but little sleep at night.

The passage of the sound into the urethra gave great pain, and a desire to empty the bladder, as in the previous case. He did not attach much importance to the local pain or frequent micturitions. The seminal losses occupied his mind completely, and he felt that he was threatened with every imaginable evil from their occurrence. He improved considerably under treatment but he is not yet cured, and I think that the prostate will remain permanently enlarged.

In all these cases of chronic congestion or chronic inflammation of the prostate complicated with seminal losses and impotence, the patient should be instructed that as soon as the local trouble is relieved he will be able to resume his procreative function without any fear of failure, and that the seminal losses are not due to any inherent weakness of constitution, or to anything that is likely to leave a permanent impression on his system. Thus re-assured, the remedies applied will have a ten-fold effect.

If the patient is full-blooded, it will be well to use antiphlogistic measures at first. Cathartics in moderate doses may be given daily, for a week, so as to produce one or two extra evacuations in the day. Following this the perineum may be painted with iodine, or blistered, the patient of course remaining in bed during the time the blister is healing. It is well to follow the blister, when the new skin has formed, by an ointment containing mercury. I prefer the ordinary *Ung. Hyd.*, to the others. It is less irritating, and will produce better

results. If the patient has a very sensitive skin, after the blister ordinary simple cerate may be mixed with the blue ointment to make it still less irritating. During the application the gums and teeth should be carefully examined, and at the first symptoms of the constitutional effects of mercury the ointment must be discontinued.

In addition the cold sitz baths described at page 230 should be taken once a day, at bed-time. The urine should be kept free of all irritating qualities by the remedies mentioned in the first case of prostatitis in this chapter.

#### CHRONIC VESICAL CATARRH.

Chronic vesical catarrh, by keeping up congestion and irritation in neighboring parts of the seminal apparatus, will sometimes be attended by frequent and painful emissions (as in prostatitis.) Though these seminal losses are often ignored by the surgeon, they seriously complicate the disease, retarding and perhaps preventing a cure. The cystitis itself produces sufficient pain and discomfort and mental distress, but when the additional weakness and the horror of impotence which every patient feels who is suffering from nocturnal emissions, is added, the case at once assumes a serious aspect, and nothing should be left undone to relieve the spermatorrhœa, while at the same time vigorous measures should be taken to cure the cystitis. The internal remedies recommended in prostatitis are also useful in cystitis, but there are others equally serviceable, viz. eucalyptus, triticum repens, pareira brava, buchu, etc. Frequent washing of the bladder should never be omitted unless the operation should produce, as it sometimes does, intense discomfort and aggravation of the pain. After the washing I am in the habit of injecting two or three ounces of

unseed oil, allowing the oil to remain in the bladder until the next urination. I have had better results from the use of linseed oil as an injection than from nitrate of silver or any of the numerous remedies used for that purpose. Where all the usual remedies fail to give relief, the operation of cystotomy should be performed. It is an operation attended with very little risk, is easily performed, and invariably gives relief. The pain ceases and the urine dribbles away without causing the patient any inconvenience. The bladder has a respite from the frequent contractions, and the patient has a chance of recovery given him, which he could not have obtained without it.

The operation of lithotomy, especially the lateral one, is sometimes followed by impotence, and sometimes, although the cases are extremely rare, it follows cystotomy. The cause of this impotence I am unable to state. It could hardly arise from cutting the few filaments of nerves in the line of incision. The laceration of the ducts, by dragging out a large stone, may be the main factor. When impotence arises from these operations there is little that can be done to cure the patient, who usually remains unable to copulate for the remainder of his days.

#### MALFORMATIONS.

Malformations which prevent sexual intercourse may be either congenital or acquired. They are not usually accompanied with spermatorrhœa. Spermatorrhœa and impotence combined have been noticed in cases of hypospadias and epispadias. Morgagni mentions a case of the former malformation in which there was sufficient irritation existing around the surface of the urethra and on its under surface near the margin

of the opening to cause ejaculations of semen three and four times each week. The constant seminal losses weakened the patient and destroyed his virility. It seems highly probable, however, that in this case there may have been some concealed lascivious habit which the physician failed to discover. Lallemand, quoting the same case, thinks there were other causes than the hypospadias at work in producing the pollutions.

Lallemand says that "hypospadias has never been studied in reference to its connection with weakness of the organs. It is well known that Louis XVI. had hypospadias, and the memoirs of Madame de Campan leave no doubt that his marriage was not consummated for several years. I have met with one case of hypospadias in the hospital of St. Eloi ; it was accompanied with nocturnal and diurnal pollutions, but I only had an opportunity of observing the patient for two or three days, and I cannot say decidedly that these pollutions arose solely from a natural weakness of the organs."

When hypospadias is accompanied by curvature of the penis the glans is usually bent downwards on the body. The enlargement consequent upon this altered form is generally sufficient to preclude intromission, and the patient becomes incapacitated for sexual congress. Epispadias may be connected with a similar curvature in an upward direction, which likewise occasions impotence. Curving of the penis in various directions sufficient to prevent penetration also arises from injuries and inflammations which destroy tissue. The new material formed to make up for loss of substance contracts like all other cicatricial tissue and the organ is consequently soon curved in the direction of the cicatrix.

In October last I had a patient in Charity Hospital who had had chancroidal sores on and below the frenum. There was

considerable loss of tissue by the ulceration, and much new fibrous tissue in its place. The glans penis was bent downwards on itself nearly at right angles, and could not be straightened. Erections occasioned great pain. Owing to the curved condition of the organ the patient had been unable to cohabit since the time he contracted the chancroids. I made an incision through the fibrous bands, straightened the organ and kept it in position until the wound healed. The patient was discharged cured.

Cartilaginous formations in the fibrous septum, between the corpora cavernosa may produce similar changes in the slope of the organ and prevent intercourse. Gross speaks of having met with such cases of degeneration in elderly persons. The cartilage was deposited in patches, and interfered with erections.

Congenital absence of the penis necessarily involves impotence. A very small penis does not prevent either intercourse or procreation. Van Buren relates the case of a patient who had a penis about three-quarters of an inch in length. The man wished to have a child, and his physician advised him to have a glass tube prepared which would accurately fit the end of the penis. With this glass appendage he had intercourse with his wife and secured the wished for results. But artificial means are not necessary ; persons with but the stump of a penis left have been known to enjoy intercourse and impregnate women. All that is needed for conception is an injection of the seminal fluid into the vagina. Once there it soon fulfills its mission, by finding its way to the ovaries.

Van Buren and Keyes quote from Aupila the case of a man who was charged with rape by a woman who had conceived from the single intercourse. The penis of the man was almost

entirely gone—only a very small stump had been left. Hence it was decided that the concurrence of the woman must have been obtained before the act was consummated, or she would not have become pregnant, and that it was not a case of rape.

A very large penis may prevent intromission and thus cause impotence. A double penis will do so likewise.

Elephantiasic tumors of the prepuce, penis or scrotum, will render copulation impossible. Calculi in the urethra may be so large as to prevent intercourse. Gross quotes Sper, of Toulon, as having treated a patient who for upwards of thirty years was debarred from sexual pleasures by large calculi in the foreskin. And Dumérial mentions a case where a calculus weighing nearly six ounces imbedded itself in the urethral canal with like results.

Extravasations of blood in the erectile tissue of the penis may cause impotence. The inflammation which follows the removal of the blood closes the spaces in the erectile tissues, interferes with the entrance of blood into them and consequently destroys the erectile power. Gross speaks of a case related by Cullany, in which the patient, after indulging excessively in sexual intercourse, ruptured some portion of the erectile tissue, allowing the blood to escape into the meshes of the organ. The result was an erection which lasted a period of sixteen days. At the end of that time an incision was made, and a large amount of blood coagula burst out. The organ at once returned to a flaccid condition, and remained so,—the patient being rendered permanently impotent by the subsequent inflammation in the cavernous portions of the penis.

Absence or atrophy of both testicles cause both impotence and sterility. The patients neither have the power of effecting penetration or of manufacturing semen. Where one testicle

is left there is usually power to effect intercourse, and to produce impregnation, though the latter is of rare occurrence.

Extroversion of the bladder, a congenital condition in which the lower portion of the abdominal wall as well as the anterior wall of the bladder are absent, is necessarily a cause of impotence and sterility in the male. It is not a cause of sterility in the female, as the functions of the vagina, uterus, and ovaries are not interfered with.

DISORDERS OF THE RECTUM WHICH AGGRAVATE OR ORIGINATE  
SEMINAL LOSSES OR DISORDERS.

Many writers on spermatorrhœa believe that certain disorders of the rectum, such as fissure, ulcer, stricture, or hemorrhoids may occasion the disease without the assistance of masturbation or sexual excess. The same authorities also attribute spermatorrhœa to the presence of pinworms in the rectum. I have seen in my own practice many cases where these disorders were aggravated by the spermatorrhœa, but I have not seen a case where disease of the rectum was the sole factor. It is reasonable to suppose that the affections in question produce congestion of the vessels connected with the prostate and seminal vesicles, and that the irritation resulting from these abnormal conditions may increase the number of seminal emissions, but I have never seen any cases of spermatorrhœa or impotence which were due solely to disorder of the rectum. They may, however, occur, and Lallemand has given several cases which are of great interest :

Spermatorrhœa from stricture—"Nicholas G——, the guard of a diligence, of a strong constitution, at the age of twenty-five contracted chancre, followed by bubo and warts. This attack of syphilis was treated with mercurials, without the patient

giving up his employment, and notwithstanding the fatigue consequent upon his frequent journeys, at the expiration of six weeks all the symptoms had disappeared. Shortly afterwards he experienced difficulty in defecation, which slowly increased so that in the course of four or five years considerable efforts were necessary to evacuate the rectum. The feces were flattened like a ribband, four or five lines in length and width and about a line in thickness. From this time G.'s health became greatly disordered, his appetite diminished, his digestion was impaired, and accompanied with the development of flatus ; he lost flesh and his weakness increased daily ; his memory was impaired, and the genital organs underwent the same changes in their functions. When he first consulted me he had scarcely any venereal desire ; his erections were imperfect, coitus was rarely possible, and ejaculation was long in taking place,—sometimes it did not even occur at all,—and it was never accompanied by any lively sensation. The concurrence of all these symptoms convinced me of the presence of spermatorrhœa. The patient told me that for four years he had been in the habit of passing semen while at stool, and that its discharge in general bore a proportion to the efforts necessary for the expulsion of the feces ; on this account, in order to render them as fluid as possible, he had reduced himself to a vegetable and milk diet. He had often attempted to use enemata, but had been unable to succeed. The abundant spermatic discharges had so worn this patient out that at the age of thirty-four he presented the appearance of a man of sixty. On examination, I discovered about two inches from the anus a nearly circular obstruction of about half a line in thickness, having an irregular opening in its center which would barely admit the extremity of the forefinger. This kind of diaphragm

obstructed the passage of fecal matter ; it was thin and soft, and felt like a cicatrix. I made transverse incisions through the obstruction by means of a straight probe-pointed bistoury passed along the index finger. These incisions were of very trifling depth, and I afterwards dilated the opening by introducing my finger deeply and pressing it forcibly in the direction of each wound until by tearing I reached the walls of the intestines.

“ Four loose flaps resulted from this operation and I prevented their re-union by the frequent introduction of my finger. The operation was attended with very little pain or loss of blood. Some time afterwards I showed the patient how to introduce a cretum bougie, of sufficient size to dilate the portion of gut which had been operated on ; this I advised him to practice daily for some time.

“ This simple means proved sufficient to procure separate cicatrization of the four flaps, after which the expulsion of the feces took place without difficulty, and the spermatic discharges ceased. All his functions were soon restored to their natural state, and Nicholas G. resumed his former occupation.”

“ M——, of good constitution, entered the army at the age of seventeen, and served for eighteen years, during which he was exposed to considerable hardships. He also committed excesses of all kinds. His health, however, continued excellent. In 1814, M——, then aged thirty-five, contracted blennorrhagia which he neglected ; the discharge diminished, but did not entirely cease before 1816, when he quitted the army. In 1820, M—— married, but did not indulge in any excesses. Some time afterwards, having been engaged as concierge to a club, he passed many nights almost without lying down. In 1824 he was suddenly seized with violent colic, which was relieved by

means of emollient injections, repeated baths, and a severe regimen, but which did not entirely leave him. Two years afterwards he had a severe hemorrhage from the rectum, accompanied with very painful tenesmus, during the violent spasms of which he noticed that he passed semen. This hemorrhage relieved the colicky pains he had suffered from, but a dysentery remained, which kept up the tenesmus and with it the involuntary seminal emissions, and caused the prolapse of several hemorrhoidal tumors with eversion of the mucous membrane of the rectum. From this period M.'s health became more and more disordered ; he lost his habitual spirits together with his sexual appetite, and his sight as well as his memory and physical strength became weakened, so that in 1827 he was obliged to give up his occupation of concierge. During the years 1827 and 1828, the chronic diarrhœa decreased in severity, and in 1829 it had become much less frequent. At length, in 1830, it was replaced by a very obstinate constipation, which in its turn also became the cause of spermatorrhœa, and increased the swelling caused by the hemorrhoids and the prolapsed mucous membrane of the rectum. This swelling was irreducible ; it increased in hardness, was irritated by the friction of his clothes, and at last assumed a scirrhouss consistency. Its presence also formed a considerable obstacle to defecation. On the 28th of March, 1831, M. applied at the hospital St. El, in the following condition : He was fifty-one years of age ; extremely pale ; his face pale, yellow ; skin muddy ; hair black ; weakness excessive ; sensibility very great ; profound melancholy ; habitual hypochondriasis ; digestion difficult, especially after the use of animal food ; defecation rendered troublesome by a red hard swelling, five or six lines in diameter across its base, projecting about an inch, and occupying about half the circum-

ference of the anus ; involuntary discharges of semen during the efforts necessary to procure a fecal evacuation ; the emission of urine followed by a discharge of a glairy, limpid, and sticky matter ; no erections during a long period ; absence of all sexual impulse ; frequent attacks of vertigo ; dazzling of the eyes ; buzzing in the ears ; attacks of heat towards the head from the slightest cause. The tumor of which I have spoken resembled a large cock's comb ; contracted hemorrhoids were situated around it ; and it seemed to have arisen from the prolapsus of internal hemorrhoids, which had brought down with them a portion of the mucous membrane of the rectum. The contraction of the sphincter ani had prevented the return of this tumor and had increased its swelling, and the friction of the patient's clothes had caused repeated inflammation and degeneration of its tissue. The base of the tumor occupied more than half the circumference of the anus, and extended above the sphincter ani. It was about six lines in thickness, and its feel was scirrrous ; a sanious discharge exuded from its surface, some points of which had even begun to ulcerate. It was, therefore, evident that no time should be lost if it were intended to remove this tumor ; the patient was anxious for the operation, and had previously asked several surgeons to perform it ; but the gentlemen had refused on account of the depth to which the diseased tissue extended. By gentle and gradual traction on the tumor I was able to bring it entirely through the sphincter, so as to bring the healthy mucous membrane into view. On the 25th of March, therefore, I commenced its removal by an incision in the healthy mucous membrane, and to arrest the severe hemorrhage which ensued, I cauterized the bottom of the wound with a fine heated iron. The tumor was then dissected out, the parts being touched with the actual

cautery as they were divided. After the entire removal of the tumor, the greater portion of the wound ascended within the sphincter. Slight inflammatory symptoms supervened, which yielded to bleeding, etc., suppuration was established, and the cicatrization of the wound was completed by degrees. The first few days after the operation the patient was unable to void his urine without the use of the catheter, and for some time afterwards he micturated very frequently. On the first of May, cicatrization was nearly completed, the feces had regained their normal consistence and were passed daily without difficulty, their passage no longer giving rise to involuntary spermatic discharge. The patient regained his health and spirits; his appetite returned, and his digestion was performed easily; his strength and stoutness increased daily. About the middle of the month his erections reappeared during the night, and afterwards became more frequent and prolonged; his cerebral functions followed the same course in their re-establishment; the dazzling of sight and cerebral congestions disappeared; and M. left the hospital on the 24th of May, perfectly restored to health. Three years afterwards, when I was summoned to Clermont to preside over a medical inquiry, M. called on me; I recognized him with difficulty, so much was his countenance changed. It is scarcely necessary for me to say that he had resumed his conjugal duties, and his occupation of concierge. The cicatrix of the anus was thin and soft, and did not interfere with defecation."

These exceedingly interesting cases are given in detail because I have not had any such cases in my own practice, and other authorities that I have examined fail to give them more than passing mention. Even allowing for the pardonable coloring of an enthusiast like Lallemand, it can readily be seen that the

rectal troubles described were very important factors in the production of spermatorrhœa and impotence.

#### SPERMATORRHœA AND IMPOTENCE FROM NARCOTICS AND OTHER FORCES.

Narcotics, such as tobacco, opium, etc., possess a decided influence over the genital function. Tobacco possesses in some cases decidedly irritable qualities and in persons with relaxed genitals may produce increase in the number of pollutions. Indeed in all cases of genital irritation it does an immense deal of harm, but I have never yet met with cases of spermatorrhœa and impotence which were entirely the result of use of this drug. Lallemand gives several.

“ M. S., of Stockholm, short and stout, and of lymphatico-sanguineous temperament, enjoyed excellent health from childhood, until, at the age of sixteen, he entered a tobacco manufactory in May, 1835, and was employed in a small room where newly made cigars were dried at a high temperature. At least ten thousand cigars were constantly in the stove. At first M. S. did not suffer any inconvenience, because the doors and windows of the drying room were left open; but about the beginning of November he was attacked by headache, which was felt principally behind the ears. This increased by degrees in severity and duration, and by the end of the winter had become constant; the patient was neither able to employ himself during the day, nor to sleep by night. Leeches were applied behind the ears, and on the following day he was seized by general indisposition, frequent vomiting, as well before as after meals, dilatation of the pupils, and constipation.

“ From this time the patient fell into a profound melancholy;

he became exciteable, timid, and incapable of any serious occupation. A seton was inserted in the nucha and the application of leeches was repeated. No improvement took place, however, and blisters were applied behind the ears; these were followed by retention of urine. Soon afterwards, weakness of the lower extremities, loss of flesh, and pallidity of the countenance were added to the patient's other symptoms.

" The mineral springs of Carlsbad and Ems, and the use of sea bathing, with cold douches on the head, relieved the vomiting, but the other symptoms still continued. In this condition the patient came to consult me in July, 1836. From information received from the medical gentlemen under whose care the patient had been at Stockholm, Paris, etc., I imagined the sea bathing had been the most useful of all means previously tried.

" I therefore advised M. S. to continue taking salt water baths until the end of the season, and consequently I did not see him again until the beginning of winter, when his weakness was much increased, his headache continued unrelieved, his countenance was pale and livid, his intellect very sluggish, his memory uncertain, his sleep short and broken, with constant drowsiness, the pupils extraordinarily dilated, and vision very imperfect; in fact the patient seemed to be still laboring under the effects produced by the cigar stove. The primary cause of this patient's condition could not be doubted; but the effects of narcotic poisons usually pass off in a day or two. In this, on the contrary, the headache had been combated by various means for two years. I was, therefore, considerably embarrassed as to what I should advise, when accidentally I saw the patient's urine. I was much surprised to perceive an abundant deposit resembling semen at the bottom of the vessel and on

questioning M. S. I learned that although he had never been addicted to masturbation, and had very rarely had sexual intercourse, shortly after the symptoms of narcotism first confined him to his bed, he had experienced abundant nocturnal pollutions which decreased in frequency, so that he had then only three or four weekly; he remarked that he was always worse on the following day. At first those pollutions were accompanied by energetic erections and lascivious dreams; but these phenomena had greatly diminished and the pollutions were no longer appreciable except by the marks left on the patient's linen. For a long time M. S. had neither experienced venereal desires nor erections, although he was only nineteen years of age. Spa water, iced drinks, cold lotions, etc., having produced no benefit, in the beginning of December, I introduced a catheter. The sensibility of the urethra was such that I determined on cauterizing the prostatic surface. I had little hope of benefit arising from this operation, but a remarkable effect was produced. From that moment the nocturnal pollutions became more and more distant and the constipation ceased spontaneously. On the tenth day the patient's urine was perfectly transparent, and from that time his headache, which had been unsuccessfully treated for two years, disappeared entirely, his sight became gradually stronger and his pupils contracted, his ideas became clearer, employment was sought and M. S. was soon able to resume his occupation. His virility returned with great energy; during six months obstinate erections were established every night, and often during the day on the least cause of excitement, but no involuntary discharges took place. These violent erections arising from the unaccustomed retention of the semen in its reservoirs diminished by degrees, the wants became less imperious and

the functions returned to their normal condition. I have seen M. S. frequently since his recovery, and I am able to state that during two years his health has been perfect. In a letter which I have recently received from him, dated Stockholm, he informs me that the change of climate has not been injurious, that he has never enjoyed better health. He has resumed the habit of smoking, for which he felt insurmountable disgust during his illness."

"I have a young man of very nervous temperament at present under my care, in whom nocturnal and diurnal pollutions have brought on pain in the loins, palpitation, difficulty of breathing, etc., symptoms which were supposed to arise from disease of the spinal cord, cardiac affection, and commencing phthisis. Among the exciting causes of these involuntary discharges, the effects of smoking occupy the chief place. The following is the patient's statement: 'At twenty years of age I wished to accustom myself to smoking, but a day never passed without my experiencing complete intoxication, attended with vomiting, vertigo and trembling of the limbs. I continued the habit, however, and I soon began to perceive that my sight became weak and that I lost my memory, my hands shook, and my digestion became much disordered. I noticed, also, great debility of the genital organs, my erections ceased and at the age of twenty-two I found myself completely impotent.'

"This patient had rarely practiced masturbation, and had never committed any excesses when he first began to smoke; his health had, previously, been excellent. It is, therefore, evident that the impotence as well as the other symptoms arose from the action of tobacco. Impotence at the age of twenty-two can only be produced by involuntary seminal discharges, provided there be no physical disability. In the

present case there was no doubt on the point, the patient having discovered diurnal and nocturnal pollutions."

"A professor, æt. thirty, engaged in a new method of tuition, had recourse to very strong coffee to keep himself awake, and took eight or ten cups every night. A large quantity of urine was secreted, and micturition was much increased in frequency. After a few weeks the desire to empty the bladder became so frequent and imperious that the patient was obliged to leave his class several times during their meeting. Soon after he suffered from constipation and disordered digestion, attended with great discharge of flatus. His intellect and memory declined, so that he became unable to finish his course of instruction, and sleep had left him entirely, although he had for some time given up taking coffee.

"On his consulting me, he confessed that he had become completely impotent, after having experienced frequent and abundant nocturnal pollutions, which diminished by degrees, and had not appeared for three months. I found his urine perfectly transparent,—almost colorless,—and very abundant. There was not the least cloud perceptible, but at the bottom of the vessel there were numerous transparent granules, which left no doubt as to the existence of diurnal pollutions. Catheterism showed excessive sensibility of the urethra, especially near the neck of the bladder; and on this account I performed cauterization. The operation was followed by rapid improvement, and a few months afterward the cure was effected by the use of sulphuretted springs."

The same author reports cases of spermatorrhœa arising from the use of camphor, ergot, cantharides, iodide of potassium, etc. If these drugs are capable of inducing this disease it must be merely temporary, and a healthy state would be recovered when

the effects of the poison had passed away. In my own practice I have not found any such cases.

#### CALCULI IN THE PROSTATE GLAND.

Small concretions occurring in the prostatic ducts excite a degree of irritation sufficient to produce in persons of average health frequent nocturnal, and even diurnal, emissions. The irritation may be even so great as that which exists in confirmed masturbators. After the concretion has been removed, it may leave behind inflammation and ulceration in the ducts which will keep up, for a length of time, the emissions of seminal fluid.

I know a married man who treated himself for gonorrhœa with a strong solution of acetate of lead. He forced the solution, by injection and pressure with his fingers, to the neck of the bladder. A few moments subsequently he had a curious feeling of distension in the prostatic portion of the urethra. The feeling of distension then changed to a sensation which he said was like a moderate orgasm accompanied with pain. The irritation which this peculiar feeling occasioned was so great that he could not sit still one minute. At night he was troubled with emissions, which were always painful. Micturition was frequent, and at its termination there were violent expulsive movements of the muscles and straining at the neck of the bladder. Two weeks from the time the injection of lead was used, he got up at night to empty his bladder, and after great straining forced out a half-teaspoonful of a material which was hard and gritty and about the consistency of plaster. With the passage of the calcareous mass the irritability and pain and emissions ceased. The patient thought that the lead had occasioned a precipitation of calcareous salts in the

prostate or ejaculatory ducts, or sinus pocularis, and that this was the whole cause of the trouble. The concretion came undoubtedly from some portion of the prostate. Whether it had anything to do or not with the injection of acetate of lead I am unable to say.

## CHAPTER IX.

### DISEASES THAT RESULT FROM SEXUAL EXCESS AND MASTURBATION.

Cerebral Anæmia—Symptoms and Course—Peculiarities of Cerebral Anæmia in connection with Excess—Spasmodic Contraction of Voluntary Muscles in Connection with Anæmia—Termination in White Softening—Significance of Loss of Memory—Local Paralysis—Effects of Hemorrhage into the Cerebellum—Sclerosis of Nerve-Fibres of Cerebellum—Hanging—Concussion of the Spinal Cord—Softening of Spinal Cord—Impotence from Sunstroke.

#### CEREBRAL ANÆMIA

Is of common occurrence among those addicted to masturbation and sexual excess. It is more likely to occur in such persons when the digestive organs are out of order and the power of assimilation feeble. Add to these a condition of impoverished blood and we have all the necessary elements for attacks of cerebral anæmia, which, in such cases, may occur suddenly when the stomach and intestines are distended with gas.

It is ushered in with vertigo and dimness of vision. The patient may drop suddenly on the floor in a "fainting fit," and become partially or completely insensible. The face is deathly pale, the pupils are dilated, and the pulse thready or altogether absent. In some cases there may be spasmodic contraction for a short duration,—of the voluntary muscles. I have seen these spasms in those who had cerebral anæmia from protracted hemorrhages. In some cases the patients have what they call a "lost feeling," which appears with a dazed expression of coun-

tenance, with pallor, and though able to retain the erect or sitting position, they are partially unconscious. The effect soon passes off, and the patient seems to be as well as before the attack took place.

With reference to cerebral anæmia, Jones has the following : "The diagnosis of cerebral anæmia is evidently a point of the highest importance, and one which may, by no means, be always easy. When the face is pale, the scalp cool, the eyes uninjected, the general circulation quiet, when there is no appearance of cerebral excitement but rather of failing power, when the recumbent position affords relief, and the distressing sensations in the head are described as a weight at the vertex, or a feeling of opening and shutting, and as if the top of the head were being lifted off,—the nature of the case is clear. But there may be conditions of the most marked general anæmia or spanæmia, in which, of course, the cerebral circulation participates, and yet in which there may arise temporarily a state of cerebral hyperæmia. By this I mean that though the blood is evidently of very imperfect quality, deficient in solids and in red cells, and that an excess of this blood is sent to the brain above what it ought, under the circumstances, to receive. Nothing is more common than to find anæmic patients complaining of headache from the administration of necessary tonics, because their nervous centres have been brought into such a state of hyperæsthesia by their impaired nutrition that they can hardly tolerate anything of a stimulant nature. A little excess, therefore, even of spanæmic blood, may cause distress to a feeble brain, which, after it has regained more healthy tone, will bear and be benefited by a larger amount of much better blood. The case is similar to that of the starved man, whose very preservation depends on his being fed most sparingly for some time.

Cerebral anæmia may terminate in chronic softening of the brain, usually denominated white softening. The affection may commence without any marked attacks of cerebral anæmia. When it arises as a concurrence of venereal excess or masturbation it is usually insidious in its onset. Though I have not seen any cases where the cause was directly attributable to these malpractices, there are enough of them on record to make the matter certain. The softening is probably the result (as it is the cause) of general mal-nutrition, which, owing to the excessive waste of nerve force consequent upon the vice, is first felt in the nerve fibres before it has established itself elsewhere. One of the first symptoms is a failure of memory. The patient drops in the middle of a sentence and forgets the balance. There is a mental blank for the time being, and only by an immense effort can the conversation be resumed. But it must be remembered that forgetfulness and spasmodic mental blanks are often occasioned by "brain fag" from overtaxed brain, from mental worry, and also from various forms of dyspepsia. It is not safe therefore to attribute the failing mentality in all cases, nor indeed in the majority of cases, to white or chronic softening unless there are other corroborative signs. If there is a diminished sensibility and loss of power in the extremities, together with loss of memory, then we may conclude that the disease is present. Chronic softening of the brain and of the cord are both curable if taken in the early stages. The treatment will be described in its proper place further on.

In addition to the general tonic treatment recommended in chapter XIV patients suffering from anæmia of the brain and cord or softening of a portion of either, arising from excess or masturbation, should receive hypodermic injections of strychnine  $\frac{1}{60}$  of grain daily unless unpleasant effects are produced

by the drug. Even when they make the patient uncomfortable a day or two's abatement from the drug may enable him to bear it better afterwards. Small doses of opium have also been recommended, but I should dread the effect on the stomach. Vigorous massage is beneficial in all cases.

HEMORRHAGE IN THE CEREBELLUM—SCLEROSIS—SOFTENING  
AND CONCUSSION OF THE CORD, ETC.—EFFECTS OF  
HANGING, ETC.

Other diseases of the brain and cord are ushered in and accompanied by frequent ejaculations of seminal fluid. Many of the cases are accompanied by impotence, others develop erotic desires, satyriasis and priapism. Diseases of the cerebellum are peculiarly liable to induce derangement of the genital functions. Sclerosis of the nerve fibres of the cerebellum is sometimes marked by nocturnal and diurnal emissions and severe cephalgia referred to the occiput. In one case of partial cerebral sclerosis which involved a small portion of the cerebellum the patient suffered from frequent emissions before any symptoms of cerebral trouble manifested themselves. Co-incident with manifestations of the sclerosis, the pollutions were increased in frequency, and as the disease progressed were of daily and nightly occurrence. The erectile power was good in the early stages and an erection accompanied each emission, but as the disease progressed the patient gradually became impotent, and all power of cohabitation was completely lost.

Hemorrhage into the cerebellum may produce a similar condition ; usually, however, hemorrhage into that portion of the brain causes priapism, a condition which is characterized by constant erection with little or no desire. Serres gives the his-

tory of eleven cases of hemorrhage, six of which were affected with priapism. Tumors in the same region have been known to cause priapism in some and in others spermatorrhœa and impotence.

It is well known that persons who have died from hanging have had seminal emissions during the death struggle. And cases are recorded and well authenticated also, in which temporary suspension of the body by means of a rope around the neck has been resorted to by masturbators to produce the orgasm and ejaculation of semen.

Concussion of the spinal cord has been known to produce persistent priapism in some cases and spermatorrhœa and impotence in others. When the principal seat of injury is located near the genito-spinal center of the cord the latter condition will probably prevail. Lallemand relates the case of a French soldier who, while attempting to climb to the room of his mistress, fell a considerable distance to the ground striking on his sacrum. Paralysis of the lower half of the body soon showed itself, and afterwards there was a priapism. His erections were constant. He endeavored by masturbation to relieve the painful distension of the penis, but without avail. He then went to his mistress and thought to relieve himself by intercourse. Though he tired the woman out he obtained no relief. His efforts in every instance failed. He had neither discharge of seminal fluid nor an orgasm while in her company. Still, strange to say, when alone and asleep in his own apartments he had both emissions and pleasurable sensations.

Acton mentions the case of a young clergyman who was subject to priapism from the slightest irritation. Walking, riding, even the friction of the trowsers would produce erection. Dr. Acton found that the trouble was partly due to a very tight pre-

puce, and by stripping the glans and frequent ablutions the patient was very quickly improved. I have seen a similar case in a clergyman suffering from malaria and slight prostatitis. Whenever he had occasion to make water he had powerful erections which were not relieved by emptying the bladder, but continued for two or three hours afterwards. By a judicious use of bromide of potassium and hot sitz baths he was very much relieved, and when the malaria was cured the priapism ceased. I have also noticed in two cases, where the patients had been indulging their venereal appetites to excess, that a priapism lasting several hours at a time was the commencement of their impotence, but in this variety of priapism there seems to be no loss of desire while the condition lasts, and they indulge themselves at every favorable opportunity. In one of these cases there was no recovery. *Progressive locomotor ataxia* was at one time supposed to arise from inordinate sexual congress and onanism, but that belief has to a great extent been abandoned. Many cases of the affection occur in persons who have lived temperate lives, and who have shunned excess in every form. However a majority of the patients suffering from locomotor ataxia have spermatorrhœa of a troublesome nature. In the latter stages of the disease there is complete loss of the virile power. In the cases which are preceded by spermatorrhœa the disease is of a more serious nature, is more apt to run a rapid course and reach a fatal termination.

Other diseases of the spinal cord, such as white softening, tumors, and injuries, such as dislocations and fractures of the vertebræ, implicating the cord, are all accompanied by some disarrangement of the genital functions. In some instances, they are characterized by frequent ejaculations of semen and

loss of virility, in others priapism and aspermatism are present. In injuries which produce a certain amount of irritation and inflammation the latter conditions are more likely to be present, while in anaemic conditions, or chronic softening, seminal emissions and impotence are usual. Chronic or white softening of the spinal cord may arise as a result of masturbation and sexual excess. The nerve fibres of the part affected show first a coagulation of the white substance of Schwann, then segmentation of the nerve fibre, and finally granular degeneration and breaking up of the nerve fibres and softening of the whole part affected. The disease is apt to pass unnoticed until there is more or less loss of power, and some loss of sensation in the lower extremities. In its inception there is diminished sensibility in the different portions of the extremities, usually, the toe. The patient feels that the spot is numb, and that the toe, or the spot affected, is not so moveable as it was before the disease. The paralysis becomes more and more marked as the months go by, for it must be borne in mind that the disease runs a very slow course until the paraplegia is complete, and the patient is unable to move his lower extremities or feel any sensation to any extent in them. He is then confined to bed. There is retention of urine, and the urine must be drawn off with a catheter two or three times each day. With all possible care exercised in keeping the bladder clean by frequent washings, cystitis is soon developed by the irritating urine, which adds much to the pain and general discomfort of the patient. I had a patient in Charity Hospital a few years ago, who had softening of the cord supposed to be due to excess of one kind or another, who suffered very great pain from his cystitis, which was increased by every washing. Even large doses of morphia failed to relieve him, given by the mouth and hypo-

dermically. I was finally compelled to resort to cystotomy, which afforded a free outlet to the urine, and allowed his bladder to be washed without causing any special inconvenience. The operation relieved him completely of the pain and diminished the amount of his cystitis to a very appreciable degree.

#### SUNSTROKE.

Sunstroke is frequently a cause of spermatorrhœa and impotence. These disorders are more likely to appear in the congestive forms of sunstroke than in that variety characterized by exhaustion or syncope. The genital derangement shows itself when the headache, vertigo, dimness of vision and other accompaniments of the disease disappear. Soon after the patient begins to exercise, frequent emissions occur which aggravate to a great degree the already existing mental depression. With the emissions there is always a loss of virile power, though the loss is not complete till a later period. In these cases there must be some organic change in the encephalon, the direct result of the *coup de soliel*, which interferes with the genital functions. This is shown by the persistence of the local affection in spite of all treatment.

In my own practice I have only met with one case of impotence from sunstroke. I have heard, however, of three other cases which were under the care of other physicians. The patient referred to was a man in robust health, full blooded and muscular, a free eater and drinker, and previous to his attack had indulged very freely in sexual intercourse. From his boyhood to the age of thirty-nine (at which time he was injured), he had never had the slightest inconvenience or illness from it. At the time the sunstroke occurred his genital functions were perfect in their action. Three weeks subsequently,

when he seemed to have completely recovered from the injury, he attempted cohabitation with his wife, but was not successful. Consecutive trials soon convinced him of his complete incapacity for sexual intercourse. When I saw him twelve months afterwards he seemed to be in perfect health, but he had no control over his genitals. Desire was present, just as much as ever, but there was no attempt at erection, and the ordinary methods of treatment availed him but little.

## CHAPTER X.

### CONTINENCE.

Fulfillment of Function Necessary to a Healthy Organization—Impairment of Function as a result of Disease, or Inaction—Results of Suspending the Function of Joints, Muscles, Eyes, etc.—Loss of Sight in Animals Secluded from the Light—Changes in Genital Organs from Continence—Reasons Why Continence is Likely to Cause Spermatorrhœa and Impotence—Cases where Impotence Existed Independently of Spermatorrhœa and Latter without Impotence—Where Continence Produces these Diseases, and Marriage is not Attainable what Advice Should be Given by the Physician—Responsibility of the Medical Adviser—Novel Aspect of the Case—Views of Clergymen on the Subject and their Advice—Opinions of Acton and Others.

Nature intended that every organ in the human body should perform some special physiological duty. To each atom a task is assigned. The normal action of one part is necessary for the healthy action of another. Though independent in function, the mutual performance of nature's task is necessary for the harmony of the whole. Fulfillment of function is indispensable to development, and to the maintainance of a healthy standard. There is no exemption from this law.

Whenever, through disease or neglect, an organ fails to accomplish the object for which it was intended, its functions become impaired, and may even be altogether destroyed. When the movement of a joint is interfered with by splints, or other surgical appliances, for any great length of time, the synovial fluid diminishes, the smooth surface of the synovial membrane becomes dryer and rougher, and the ligaments become thicker.

The movements of the joint are very much impaired by these changes, and if the immovable condition should be continued for too long a period permanent ankylosis of the joint surface would take place, with entire loss of movement. When muscles are maintained in a quiescent state by paralysis or by mechanical appliances, the muscular fibrillæ undergo fatty degeneration. Atrophy of the muscle soon follows, with complete loss of the power of contraction. If the eyes are not employed, diminished ocular perception and even total blindness will occur. This is often witnessed in young animals confined in darkened places, or where there is an entire seclusion from light. Fishes living in caves where no light enters lose their sight rapidly. In the tanks of the New York aquarium many of the fishes were rendered blind from the same cause. Most of the old ones had very large opacities of the cornea.

The genital organs are not exempted from the general law, *viz* : that the neglect to fulfill a function may be followed by a loss of power to perform that function in a natural manner. It is true that a man may go for years without intercourse, may then marry, and be able to copulate with success ; but such cases are exceptional. The organs of generation were intended for the propagation of the species during adult life, and the performance of their functions in the married state conduces to a healthy condition of mind and body. Every man with a healthy organization should be married before the age of twenty-four.

Sexual debility is far more frequent among men who marry after the age of thirty-five than it is among those who marry young, and failure occurs earlier. I think it is not advisable for a marriage contract to be made before the age of twenty-four unless there should exist some special disorder of the genitals

which may be benefited by such a course. The questions may be asked, why define as a limit the age of twenty-four? Are the genitals not active and ready to fulfill their physiological purposes soon after the age of puberty? It is true that the age of puberty is the commencement of entirely new conditions, and it would be possible for the organs to be employed in the fulfillment of their natural function; but I believe that while the development from youth to young manhood is going on, while the tissues are in process of development for the more active life of maturer years, sexual intercourse would probably retard that growth and development. When the youth has reached his full growth, then, is the time for him to indulge in legitimate sexual intercourse; then the nervous impressions due to repeated orgasms will do little or no harm, unless there is great excess.

With the boy who has been free from bad habits and who is thoroughly educated as to the necessity of holding the sexual appetite in abeyance up to a certain age, so that he may become a perfect man, there will be little difficulty in preventing improper intercourse or legitimate intercourse before the time stated.

Acton says: "An almost infinite variety of opinion exists on this subject, between the extreme proposition on the one hand, that a young man has, or need have, no sexual desire, at least to any troublesome degree, and consequently need neither take precautions, nor be warned against the danger of exciting his sexual feelings; and the equally extreme doctrine on the other hand, that the sufferings of chastity are such as to justify, or at least to excuse, incontinence. My own opinion is, that where, as is the case with a very large number, a young man's education has been properly watched, and his mind has not

been debased by vile practices, it is usually a comparatively easy task to be continent, and requires no great or extraordinary effort; and every year of voluntary effort at chastity renders the task easier by force of habit. That it is an easy task to be continent is only true of those who have been comparatively pure, in thought, word and deed. How very few of these exist is best known by the priest and physician. The fact is that even with the rarest opportunities for observation in these cases it is almost impossible to define any universal law or absolute rule to which every case is amenable. We must at all times be ready to meet, and to change our practice for, the exceptional case, and to give advice which perhaps may be entirely opposed to the formulated maxims used in a preceding case. The attempt to make any rule entirely absolute is an absurdity which in our practice too many of us commit."

Lallemand, speaking of continence, says: "There is a constant state of orgasm and erotic preoccupation, accompanied with agitation, disquiet, and malaise, an indefinable derangement of the functions. This state of distress is seen particularly in all young men who have arrived at puberty, and whose innocence has been preserved from any unfortunate initiation. Their disposition becomes soured, impatient and sad. They fall into a state of melancholy, or misanthropy, sometimes become disgusted with life, and are disposed to shed tears without any cause. They seek solitude without any cause in order to dream about the great mystery which absorbs them, about those great unknown passions which cause their blood to boil. They are at the same time apathetic, restless, agitated, and drowsy. Their head is in a state of fermentation, and nevertheless weighed down by a sort of habitual headache. A spontaneous emission or escape which causes this state of plethora to cease, is a

true and salutary crisis which, for the moment, re-establishes the equilibrium of the economy." In another chapter the same author continues: "The effects produced by complete privation afford the most certain evidence of the original strength or debility of the genital organs. If they are powerful, such privation proves a kind of torture which may induce the most serious abuses or disorders in all the functions; if irritable, prolonged abstinence causes abundant and frequent nocturnal pollutions; if weak, and little developed, such privation is not painful; the pollutions are rare and in small quantity at first, but still they produce serious effect, and after a time they become more and more severe and difficult of cure.

"These signs of energy, irritability, or weakness in the genital organs, are more certain than those drawn from their external appearance.

"The patients of whom I am about to speak are all remarkable for the facility with which they support privation from sexual intercourse.

"Their lives are exemplary in all respects; not only have they never committed excesses or practiced abuse, but for the most part they have never had any relations with the opposite sex. In these cases the temptation is "so slight" that to conquer it is not any great merit. Such constant and easy continence is an unfavorable sign when considered in reference to the powers of the genital organs; and we should much deceive ourselves if we adopted, without examination, the explanation the patients give of their conduct. They generally attribute their continence to strict morality, to religious principles inculcated in early infancy, or to the effects of good example; they omit altogether to mention the little desire they have had to combat. But when such patients wish to break

their long and easy continence they find themselves completely unable ; not on one occasion only, but habitually ; not under unfavorable circumstances, but during many years of marriage. Such a state of things during the period of the greatest virility completely explains the ease with which they maintained their former long continence. Most of these patients, too, feel a strange presentiment of the catastrophe which awaits them. They have a suspicion of their weakness, and hence they manifest an instinctive repugnance to marriage, and hesitate long before they make up their minds to enter that state.

“A great facility, then, of supporting absolute continence ought to lead us to suspect want of power in the genital organs as well as diurnal pollutions when nocturnal ones do not occur, because the continued presence of semen will stimulate the least powerful organs into occasional action.

“Let us now see what are the effects of such long continence, especially in these weak individuals. If fatigue be hurtful to all organs, so moderate exercise is necessary to them as soon as they are in a condition to act. The generative organs are not beyond the influence of this general law. All surgeons admit that prolonged inaction produces the same effects on the genital organs as on any other ; that is to say, that it diminishes their activity. The inactivity of these organs in children and eunuchs arises from the non-secretion of semen ; no pollutions can therefore arise in such cases, and the health does not become disordered. On the contrary, in the un-mutilated adult want of power can only be attributed to very serious diurnal pollutions, often very difficult of cure. As soon as the evolution of the genitals commences, the testicles begin to act ; if their structure be not accidentally injured, they continue to secrete until a very advanced age. This secretion,

it is true, may be diminished by the absence of all excitement, direct or indirect, or by momentary weakening of the system, or by the special action of certain medicines ; but it never ceases entirely from the age of puberty to the commencement of old age. Hence results an evident deduction, viz. : that in the absence of all voluntary evacuation the seminal vesicles must become filled more or less rapidly, and after a time must become distended ; so that if the secretion be not evacuated in quantity in an open and sudden manner, it must escape by degrees at periods more or less close and under circumstances which render this evacuation difficult to be ascertained ; in other words, if nocturnal pollutions do not occasionally occur it is because diurnal ones exist.

“ From the numerous cases I have related, it is evident how slow and insidious the progress of this disease may be, and it is remarkable that those who have fallen into the most deplorable condition, and whose cure has been most difficult, have been precisely such as had supported the disease longest without suffering much. In studying the cases attentively it becomes evident that the disease commences by nocturnal pollutions, accompanied by lascivious dreams, energetic erections, and a lively sense of pleasure. But this orgasm diminishes by degrees, and the emissions at last take place without erection or sensation ; such nocturnal pollutions become more rare and sometimes cease entirely, and then the health of the patients becomes seriously and rapidly affected, much to their astonishment, as they have no suspicion that diurnal pollutions have been added to the nocturnal ones, and at last have entirely taken their place. By reflecting on the succession of the phenomena in individuals who have done nothing to aggravate their condition, and taking into consideration the salutary

effects which sexual intercourse produced in many of the cases that have come under my notice, it is impossible not to admit that prolonged inaction of the genital organs diminishes the tonic resistance of the ejaculatory ducts, disorders their sensibility, and perverts their functions, without being able to prevent the formation of semen by the testicles, or its passage into the seminal vesicles. Absolute continence, therefore, renders the expulsion of semen more and more easy in these cases without diminishing its secretion in an equal proportion."

There is some truth in the above description, but, I think with Acton that it is exaggerated. He says (and his opinion only repeats the opinion of all who have had much to do with the cases) : "It is a matter of every day experience to hear patients complaining that a state of continence after a certain time produces a most irritable condition of the nervous system, so that the individual is unable to settle his mind to anything ; study becomes impossible, the student cannot sit still, sedentary occupations are unbearable, and sexual ideas intrude perpetually on the patient's thoughts. When I listen to this complaint I have little doubt of the confession that is to follow ; a confession that at once explains the symptoms. Of course in such cases I am prepared to learn that the self-prescribed remedy has been most effective, that sexual intercourse has enabled the student to at once recommence his labors, the poet his verses, and the faded imagination of the painter to resume its fervor and brilliancy ; while the writer, who for days has not been able to construct two phrases that he considered readable, has found himself, after relief of the seminal vesicles, in a condition to dictate his best performances. In the individuals constituted as these are, continence is sure to induce this state of irritability. Still no such symptoms, however feebly described,

should ever induce a medical man to even seem to sanction his patient's continuing the fatal remedy, which is only perpetuating the disease. In all solemn earnestness I protest against a medical man countenancing such a remedy. It is better for such a youth to live a continent life. The strictly continent suffer little or none of this irritability ; but the incontinent, as soon as seminal plethora occurs, are sure to be troubled in one or other of the modes above spoken of, while the remedy of indulgence, if effective, requires repetition as often as the inconvenience returns. If, instead of gratifying his inclination the young patient should consult a conscientious medical man, he would probably be told and the result would soon prove the correctness of the advice given, that low diet, partial abstinence from meat and stimulants, aperient medicine if necessary, gymnastic exercises, and self control will most effectively relieve the symptoms. The truth is that most people, and especially the young, are often only too glad to indulge to find an excuse for indulging their animal propensities, instead of endeavoring to regulate or control them. I have not a doubt that this sexual suffering is often much exaggerated, if not invented, for this purpose."

Van Buren & Keyes on this point also agree that the nervous hypochondria, with despondency, "the excited and suspicious tendencies so marked and remarkable in nearly all men at any time of life in connection with functional or organic trouble in the genito-urinary tracts, are only explicable by recognizing that nature has implanted in man a sexual want which controls many actions of his life, impels him to continue his species, and cries out in distress whenever it is trifled with, ungratified, or over-stimulated, or whenever its existence seems to be menaced. A man will feel more depressed at seeing a little

excess of phosphate in his urine which he thinks, in spite of all proof to the contrary, indicates a "local weakness," than he will at loss of memory or mental incapacity, which he can recognize himself and be fully conscious of. There are few men who would not rather lose a leg or an eye, than a testicle ; while functional or organic disease of the bladder, testicles, or penis, cause more mental inquietude and distress to its possessor than does a cavity in a lung. Why should this be, except that nature has endowed man with an instinct of terror at the idea of losing his sexual capacity, and has established a law for the regular and judicious performance of the sexual act, which he must obey or else suffer in some way the penalty ? This suffering may not be evinced by symptoms in the organs of generation themselves, and probably will not be unless through excitement of those organs by abuse or irregular use, or unless through their stimulation by erotic fancies, the patient attract the morbid nervous tendency to a local explosion. A man perfectly pure in thought and deed would not suffer from vesical neuralgia, unless, of course, some physical lesion of the parts should first occur to excite local congestion. Old maids and priests suffer from sexual distress as much as young and old bachelors and widowers, but they very rarely give any local signs of trouble. Their symptoms may be scattered over all the organs, and may impair any or all of the functions."

In consideration of subjects of this kind, a medical man must look at facts as they really are, without bias or pre-conception, not as he thinks they ought to be, and while on the main points I believe as Acton does, there are unfortunate cases, where it is impossible to regulate the matter by simply giving advice. We must ascertain first, if the advice can be followed, and if experience teaches that it will not be followed,

then it is our duty to regulate and diminish the amount of immorality indulged in. Many men are by nature polygamous, they will indulge in the gratification of their passions, regardless of consequences ; when this is the case then proper means should be taken for their guidance, in order that they may not rush into excess, or abuse themselves in a way detrimental to their physical welfare. It is not advisable to say to the unfortunate possessor of these feelings "you must not indulge at all no matter what the consequences may be," but it is possible to keep the patient controlled by a healthy sexual relation, in the married state if possible. If that condition cannot be attained, then it is the physician's unpleasant duty to accept the fact and to regulate his illicit intercourse, which he certainly will indulge in, no matter at what risk or consequence.

If a robust, full blooded man, with a fully developed venereal sense, becomes continent, nocturnal and perhaps diurnal pollutions will precede the impotence. Erotic impulses, sometimes amounting almost to satyriasis, may also occur before the virile power is extinguished. The spermatorrhœa is occasioned because the secretion of the testicles, prostate and other glands is manufactured rapidly, and has no natural cause for expulsion.

The loss of virility may or may not be followed by diminished secretion, and there are cases where the ejaculations of seminal fluid will not occur oftener than once or twice a year. Such cases are exceedingly hard to manage.

When a man of small animalism is continent for a number of years, what little desire he may have formerly possessed is likely to disappear completely, and the emissions will be infrequent in both classes of patients, with or without spermatorrhœa, the genital apparatus will ultimately show the relaxation

and other changes that occur as the result of masturbation. In a few instances there is atrophy of the testicles, but it is most unusual in persons under forty-five.

In this connection the following cases will be of interest, as showing some of the varied results of continence: In the winter of 1876, an undertaker of this city was admitted to St. Francis Hospital, suffering from prolapse of the rectum. He was forty-five years old, and his general health was good. After recovering from the prolapse he informed me that he was impotent, and likewise was subject to nocturnal emissions. During the whole course of his life he had refrained from any gratification of his passions, and had never even attempted sexual intercourse, until within the past year. Twelve months previous to his admission, he had married a lady, thirty-eight years old, and without expecting anything of the kind found himself impotent and unable to consummate the marriage. Every attempt at intromission failed, through weak erections, and rapid emissions of semen. He denied having practiced masturbation, and the condition of his genitals seemed to confirm his statement. From the age of twenty-five he had emissions once a fortnight, and frequent erections, but the erections were feeble, and lasted only for a few moments. Since his marriage the emissions had increased in frequency, and there seemed to be much relaxation and apparent elongation of the penis. The patient did not seem to be depressed by the fact of his impotence. He attributed it all to total abstinence, and hoped that, in the course of time, nature would effect a cure.

I am aware that there are a few cases recorded by Lallemand and others where diseases of the rectum were a cause of temporary impotence, but the patients were not continent, and they recovered from the spermatorrhœa and impotence when

the prolapse was cured. In the patient whose history I have just given, the prolapse of the rectum may have just added to his genital weakness, but I am satisfied that it was not the cause of it.

A second interesting case of impotence from continence, unaccompanied by spermatorrhœa, came under my care during the winter of 1881. The patient was thirty-eight years old, and a broker by occupation. His general health was excellent, and he was constantly and actively employed in a flourishing business. He stated that he commenced to masturbate a little when a boy of twelve, and occasionally was guilty of the habit until he reached the age of sixteen, at which time he discontinued it altogether. At twenty he had intercourse in a natural way, and without any difficulty whatever. For six months subsequently, he cohabited at intervals of two weeks, and never at any time indulged to excess. A period of eight years then elapsed without any opportunity for sexual congress. At the termination of that period he again attempted to renew his sexual relations with his former partner, but to his great annoyance failed. Though he subsequently made frequent trials, the result was the same. He finally gave up all hope, firmly believing that his impotence was beyond the reach of therapeutical agents. He attributed his loss of virility to continence, and not to any dissipation or bad habits in early life. A period of ten years elapsed, during which interval he tried sexual congress but once, and was unsuccessful. He had a few emissions, and few erections, and for twelve months previous to calling at my office, he had had only three emissions, and no erections of any degree of permanency. He thought his desire for sexual pleasures had not diminished, but the knowledge of his impotence being ever present, would prevent him from attempting it again. This

mental state necessarily complicated his case, and added to the difficulty of a cure. On making an examination of his genital organs, I found the penis and testicles somewhat smaller than natural. The left testicle was smaller than the right, and more than ordinarily sensitive to pressure. Otherwise the parts were unchanged. Knowing that the patient's habits were excellent, and that his general health was good, I made a favorable prognosis, and put him under treatment. He continued under treatment for three months, improving slowly. His erections were more frequent and natural, and his hopes of final recovery revived. He suddenly, without any notification, ceased his visits at the office, and I saw nothing more of him until the summer following, when he came in as I was about leaving for the country, and with a broad smile on his face said, "Doctor, I have the clap." He then went on to inform me that a few days after he had ceased calling, he renewed his attempt at intercourse, and had succeeded, and had kept well in that respect ever since. His gonorrhœa was the result of leaving his mistress, and assuming relations with a less reliable woman. These two cases are very good examples of the varieties of impotence by continence, viz : that which is characterized by activity of the secreting organs, and resulting in spermatorrhœa, and that which is accompanied by loss of erection and diminished secretion.

Now, the most difficult problem to solve, as already stated, is the best line to follow in the way of treatment. Of course, if the spermatorrhœa and impotence and great nervousness and mental distress which usually attend such cases is the result of continence, then one of the principal things to advise is sexual intercourse, whenever the patient's physical weakness is removed and the organs able to fulfill their function. Here the physician is brought face to face with the great moral law, which

is supposed to govern, but which really does not govern civilized Christians. Marriage is in many cases impossible, from lack of means, or inclination, or the presence of an acceptable woman willing to enter into the partnership. It is a difficult matter to determine, while we all acknowledge that a pure life is the best under all circumstances. Here is a man who cannot be cured by legitimate moral means, but can be relieved by breaking a moral law. Acton seems to have been troubled by the same vexatious problem. He says: "It was far from my intention when I commenced this work to put myself forward as a religious teacher, but I so frequently receive letters from young men, seeking advice how to cure the lusts of the flesh, that I was induced to inquire as to the views entertained upon the subject by the modern executive of the church of England. I found, on application to competent persons, that it is not deemed expedient to be very diffuse upon the observance of the Seventh Commandment. I was referred, indeed, by one worthy divine to the heads of "Fasts and Vigils," in our offices, but after careful perusal, I was unable to discover much that could be of assistance to the earnest layman desirous of arming himself against the promptings of nature and imagination. All the help that one excellent clergyman can give to tempted clergymen brethren, is this: "Another man is tempted by evil thoughts at night. Let him be directed to cross his arm upon his breast, and extend himself as if he were lying in his coffin. Let him endeavor to think of himself as he will be one day stretched in death. If such solemn thoughts do not drive away evil imaginings, let him rise from his bed and lie on the floor."

Going further into the religious aspect of the case, he says: "The Church of Rome, with that practical wisdom which so

often characterizes her, and which no Protestant prejudices should lead us to deny, has in many of her arrangements and in much of her authorized teaching, fully and sympathizingly recognized the great facts of the existence and intensity of sexual misery and temptation, and of the absolute necessity of sexual purity, for those who would reap the blessings of continence."

The following extracts from the instructions on the commandments and sacraments, by St. Alphonsus M. Liguori, are teachings referred to above: "In every sin of thought there are three things, the suggestion, the delectation, and the consent. The suggestion is the first thought of doing an evil action which is presented to the mind. This is no sin; on the contrary, when the will rejects, we merit the reward. Even the saints have been troubled by bad thoughts. To conquer a temptation against chastity, St. Benedict threw himself amongst thorns, St. Peter of Alcantara cast himself into a frozen pool. Even St. Paul writes that he was tempted against purity. After the suggestion comes the delectation, when if the person is not careful to banish the temptation immediately, but stops to reason with it, the thought instantly begins to delight, and thus continues to gain consent of the will. As long as the will withholds the consent, the sin is only venial, and not mortal. But if the soul does not return to God, and make an effort to resist the delectation, the consent will be easily obtained. The soul loses the grace of God, and is condemned to hell, the instant a person consents to the desire of committing sin, or delights to think of the immodest action as if he were committing it. This is called morose delectation, which is different from the sin of desire. He who contracts the habit of consenting to bad thoughts, exposes

himself to great danger of dying in sin—first because it is very easy to commit sins of thought. In a quarter of an hour a person may entertain a thousand bad thoughts. My brother, do not say, as men do, that the sins against chastity are light sins, and that God has compassion on such sins. What I do say is that ‘No fornicator hath inheritance in the kingdom of Jesus Christ, and of God.’ (Eph. v, 5.) Even the pagans held impurity to be the worst of vices, on account of the bad effects which it produces. Seneca says: ‘Impurity is the foremost of the world’s wickedness,’ and Cicero writes: ‘There is no more heinous pest than the indulgence of uncleanness.’ St. Isodore has written: ‘Whatsoever sin you name you shall find nothing equal to this crime.’ For those who are unable to abstain from impurity, or who are in great danger of falling into it, God has, as St. Paul says, instituted matrimony as a remedy. ‘But if they do not contain themselves, let them marry, for it is better to marry than to be burnt.’ (I. Cor. vii, 9.) But, some may say, father, marriage is a great burden. Who denies it? But have you heard the words of the apostle: It is better to marry, and to bear this great burden than to burn forever in hell. But do not imagine that, for those who are unwilling or unable to marry, there is no other means but marriage by which they preserve chastity. By the grace of God, and by commanding themselves to him, they can conquer all the temptations of hell.” “The fifth remedy, which is the most necessary for avoiding sins against chastity, is to fly from sins against chastity, fly from dangerous occasions. Generally speaking, the first of all the means of preserving yourself chaste, is to avoid the occasion of sin. According to St. Bernardine, it is a greater miracle not to fall into the occasion of sin than to resuscitate the dead. It is necessary to abstain from reading bad books, and not only

those that are positively obscene, but also of those that treat of profane love. O, fathers! be careful not to allow your children to read romances. These sometimes do more harm than even obscene books; they infuse into young persons certain malignant affections which destroy devotion, and afterwards impel them to give themselves up to sin. And here I repeat, do not allow your daughters to be taught letters by a man, though he be a St. Paul or a St. Francis of Assisium."

So much for the religious aspect of the case. There can be little doubt of the correctness of the advice given, but it does not answer the original question. I presume that it is the duty of the conscientious physician to say to the patients suffering from continence, or the result of continence, that marriage is the only remedy—not promiscuous intercourse—and leave the rest to the patients. My experience is that they have acted as they pleased so soon as they learned that intercourse was one of the essentials to perfect health—while a few get married, the large majority indulge their natural instincts without the formality of marriage, and dispense with further advice on the matter. Besides spermatorrhœa and impotence, prolonged continence may give rise to affections of the prostate and bladder. It is at times a cause of the worst forms of satyriasis, and pathophobia. These affections are considered in another chapter.

Prolonged continence sometimes develops in females all the series of nervous manifestations classed under the head of hysteria. It is also a common cause of nymphomania, (see Chapter VIII.) and of ovarian neuralgia.

Women do not suffer so much as men do from continence. Indeed the majority of healthy women are not much injured by total abstinence after the age of thirty, and to very many

sexual intercourse is a source of pain and mortification instead of pleasure. They are not compelled to suffer as men are from the distension of a highly organized set of organs, with a constant secretion, which creates in most men an irritation that certainly injures unless relieved by nocturnal emission or intercourse. The congestion accompanying the menses creates only a temporary excitement and desire, which is relieved at once by the flow of blood.

The treatment of these cases will be considered in connection with the treatment of spermatorrhœa and impotence.

## CHAPTER XI.

### CLASSIFICATION OF CASES FOR TREATMENT.

Universal Rules which should not be Universal—The Danger of Advising a Single Method of Treatment for all Cases of Spermatorrhœa and Impotence without a Special Study of Each Case—Errors in Treatment—Bromide of Potassium as a Remedial Agent—Its Effects on the Vascular and Nervous Systems—How it Affects the Digestive Function—Injurious Effects Arising from the Indiscriminate Use of the Drug—Bromide of Potassium as a Cause of Impotence—Cauterization of the Prostatic Portion of the Urethra—Its Universal Use in the Treatment of Spermatorrhœa—Why a Division of Cases is Necessary—Four Varieties of Spermatorrhœa and Impotence—Peculiarities Exhibited by Cases of the 1st Class—Cases which are Incurable—Second Variety—Distinguishing Features—Patients Amenable to Treatment—Peculiarities of Third and Fourth Class of Cases—Greater Frequency of the Milder Forms of Spermatorrhœa and Impotence.

There is a growing tendency in the modern mind to “make laws as well as to break them.” In every department of medicine stringent rules are formulated to guide all persons irrespective of age, sex, hereditary tendencies, idiosyncrasies, occupations, sympathies or surroundings. The pathology of a disease is scientifically described. Each symptom pointed out. But just there the discrimination is apt to terminate. A stereotyped set of remedial agents is recommended for every patient suffering from the disease spoken of. No importance seems to be attached to the fact, that “what is one man’s meat is another man’s poison.” It is a general though a fallacious idea that an agent which is beneficial in one case, must necessarily be of utility in every other case of the same nature. It is this which occasions the cry of humbug in medicine. The young prac-

titioner with his first case, follows the prescribed rules—gives his patient the orthodox medicine, and is unsuccessful. His faith is shaken in the authority once revered, and he turns in another direction for a more reliable guide. His second case may, in its results, be a mere repetition of the first, unless that failure has taught him to examine for himself the phenomenal symptoms or characteristics which belong to the individual under treatment. The fault is not in the medicine prescribed, in its quantity or quality. The mistake lies wholly in the neglect of a systematic classification of different forms of the same disease, founded, to some extent, on the peculiar developments and idiosyncrasies of the patient. There are so many remarkable differences in the habits, occupations, and vitality of people, that the treatment successful in one instance may be absolutely injurious in another. Each case demands special study. Each peculiar tendency and sympathy should be contrasted and studied. Occupations and their varied results on the economy should be examined. Previous effects of treatment are always to be considered. Medicines which before failed, or which have produced unpleasant effects on the economy, or for which the patient had a disgust, should never again be repeated.

Such a classification is particularly necessary in cases of spermatorrhœa and impotence and the special study of each case before treatment is commenced is an imperative necessity. Usually in these cases little or no differentiation is attempted. Any one who takes the trouble to peruse the various text-books and monographs on the subject, will find an arbitrary system of medication adopted. For instance bromide of potassium is recommended to the majority of patients suffering from seminal emissions. Its use is general. But I think the experience of those who have looked beyond the temporary and per-

haps only apparent beneficial effects of the drug, will agree with mine. I have no hesitation in saying that its administration in spermatorrhœa and impotence is a source of incalculable injury to the patient. To understand this statement more thoroughly, let us for a moment examine the local and constitutional effects of the drug.

When given in full medicinal doses for two or three weeks it has a depressing effect on the nerve centers. This is evidenced by the defective memory, dullness of sight and hearing, tendency to sleep and weight and fullness about the head. It is known to diminish the supply of blood to the brain and cord and thus aggravate the symptoms mentioned. It is known to impoverish the blood and prevent assimilation. Few persons can use bromide of potassium for any great length of time without suffering from nausea, and other signs of defective digestion. It impairs, and may altogether destroy, the virility of the patient. Hensle says it produces insensibility of the fauces and *torpidity of the genital organs*. Many other authorities agree with him.

Bartholow says with reference to the action of the bromides : "A very notable action of the bromides—chiefly bromide of potassium—is the diminution of the sexual feeling and of the power of the erections produced by it. This fact has been established by abundant clinical evidence. . . . The pallor and anæmia of bromism are due to several causes: to the diminished action of the heart, slowness of the capillary circulation, a consequent interference in the metamorphosis of tissue, derangement of digestion and assimilation in consequence of gastric catarrh, and diminished blood supply to the cerebro-spinal axis, the disorders of voluntary movement, the uncertain gait, the apparent defects of co-ordination, are variously explained, but they are doubtless made up of several factors of which

cutaneous anaesthesia is the most influential. The bromides possess the power to destroy or impair the irritability of the motor and sensory nerves, and the contractility of muscle, and to these effects must be attributed in part the disorders of voluntary motion noted above. . . . . It is very evident that the bromides depress certain organic functions : they diminish the action of the heart, lower the animal temperature, and lessen the blood supply to various organs. These results can only be accomplished by a sedative influence on the sympathetic nervous system. Some observers have maintained that in this action lies all the physiological power of the bromides."

Little argument is needed to show that the administration of a medicine which in nearly all persons produces the effects mentioned must necessarily be injurious to patients suffering from the effects of masturbation or sexual excesses. A patient whose nervous system is already anaemic from bad habits and frequent seminal losses certainly does not need a medicine which still more diminishes the quantity of blood going to his brain and spinal cord. When the digestive function is disturbed and the powers of nutrition enfeebled, it is worse than useless to prescribe a drug which causes nausea and vomiting and prevents absorption. If the genital organs are weakened and virile power unequal to the demands upon it, it will not conduce to the benefit of the patient to administer a medicine which has the power of destroying erections. The nerve power, the vitality of all persons suffering from spermatorrhœa is much below the normal standard. The bromides by diminishing this force can do no possible good unless indeed on the principle of *similia similibus curantur*. The reason for the indiscriminate and careless use of this drug is simply because it has the power of diminishing the sensibility of the mucous lining of the urethra, especially of that

portion contained in the prostate gland. In this way it diminishes for a time the number of seminal losses. This temporary improvement in the eyes of the ignorant patient is a positive sign of a permanent curative action. And for the sake solely of this apparent benefit much evil is done and a disturbed and diseased system brought still lower in the scale.

There are only a very few cases where the administration of the bromides is admissible, and these will be pointed out in another chapter.

The tendency to pursue a stereotyped course of treatment is also witnessed in the local management of spermatorrhœa. Many years ago Lallemand recommended caustic applications to the prostatic portion of the urethra to diminish the irritability of the orifices of the ducts which open in this portion of the canal. Since his time caustic applications, both in liquid and solid form, are unusually recommended as the principal local remedies. In the cure of the affection, there can be no doubt that the use of caustic in certain cases is followed by beneficial results, and I have myself used them with great benefit. But the majority of patients only receive a temporary relief, which is dearly paid for by the intense suffering from caustic application which invariably ensues. And the discharge of blood and purulent exudation, independently of the pain, add very much to the mental depression of the patient.

#### CLASSIFICATION OF CASES.

A systematic division of all cases of spermatorrhœa can always be made. Each class affords some special indication for treatment which, if employed in another class, would be exceedingly injurious. Not only is this distinction between each class a necessity, but each special case must be studied

thoroughly by itself, without respect to any other case of the same class. Each patient usually presents some peculiarity which requires the physician to vary his treatment in one or two important particulars upon which the permanent relief of the patient may depend.

The various cases of spermatorrhœa may be divided into four different classes. Though each class will be found to have many symptoms in common, yet there are variations so marked that there will be little difficulty in placing each patient in his proper class for treatment. When this division is made and the characters peculiar to each described, it will be well to give the various local and constitutional measures which have been found useful in all—therapeutical agents which are indicated in all, and then point out the special indications which belong to each particular class.

In the *first class* the mental derangement is greater than the physical. The mental status approximates more nearly to that of the lower animals than in any other affection short of complete insanity. These cases are happily of rare occurrence.

Patients of this class are found usually between the ages of sixteen and twenty-five. The habit of masturbation commenced in early childhood and was indulged in to excess for many years. The patient does not seek medical advice himself. His parents or friends generally compel him to submit to treatment. He has been warned and instructed carefully as to the evils which surely accompany a persistence in the vile habit. The best directed efforts to show him that the path he is following will eventually terminate in complete destruction of mind and body, give negative results. And though he is fully aware of his debased, hardened condition he persists in self-pollution.

He accomplishes the act at every opportunity. Alone and in company of friends or strangers he gives rein to his propensities. Every vestige of moral sense seems to have disappeared and he cares only for the sensual gratification which masturbation produces.

This class of patients may or may not be emaciated. I have seen two cases where there was very little loss of flesh. The face has usually a yellowish pallor, and is often covered with pimples. The eyes are restless and wander from one object to another, studiously avoiding the gaze of the examiner. The head hangs down and rests on the chest. He is restless and unable to remain long in one position. He "slouches" around from one corner to another, dragging his feet slowly along after him as if they were too heavy for his body. When the countenance is at rest he has all the appearance of an imbecile. The hands are placed between the thighs, or are held in the pockets of the pantaloons in close proximity to the genital organs. The answers which he gives may have no special bearing on the subject under examination. He prefers to answer in monosyllables. "Yes" and "No" are all that can be obtained from him in the way of information. He cannot or will not pronounce a sentence of any length. To get more of his history some harshness is necessary. In fact his mentality is so much below par—so sluggish in its action, that only by great labor can he speak connectively. He may be seen even while undergoing the physician's examination to twist his hands about and so endeavor to bring on an orgasm. Sometimes his public attempts at masturbation seem to be done unconsciously. The mind losing sight of the fact that persons are around him, is occupied by the one controlling desire, a desire which absorbs every faculty of his being.

In all such cases there is no will-power left to assist the efforts of the physician in promoting a cure. A favorable termination of the disease is almost impossible. An unfavorable prognosis should always be given. If, however, the patient is less than eighteen when brought under observation, the treatment may not be altogether without favorable results. The young have great power of reaction, and if means are employed to keep the act of masturbation from being committed for a few months, and efforts made to build up the patient, a cure may be effected. The close and constant supervision which is necessary for this result, however, is rarely attainable. To show this, I will relate the case of a young man, a resident of New York, and the son of a wealthy citizen, who masturbated himself into insanity, and into an early grave. His nurse taught him to masturbate when he was but five years of age. He followed the vicious instructions of his teacher until he was sixteen years old, at which time the whole household became horrified at his public attempts at self-pollution. He titillated his genital organs in the presence of both male and female members of his family. Prayers and threats were equally unavailing in changing the current of his thoughts or suppressing the habit. He was watched night and day by faithful servants, but he still managed to masturbate by means of bedclothes and peculiar twisting motions of his body and limbs. His hands were tied and his genitals blistered, but yet he twisted and contorted until he produced emissions. Finally he was placed in a warm room without clothing and with little bed furniture, and made to lie with his hands and feet fastened. He was fed and washed by the servants who never left him alone for a moment. Under this harsh treatment he was prevented for a few weeks from indulging his vicious propensities. The physician then

thought that by placing him in a room with a prepossessing female, he might be led to turn his sensual devices into their natural channel. The questionable advice was followed, a handsome *nymph du pavé* was obtained and placed by his side. Every restraint was removed and developments awaited. It is hardly necessary to say that the experiment failed ; for at the very moment the patient's hands were freed he commenced masturbating with redoubled energy. He paid no attention whatever to the female by his side.

A few months subsequently epilepsy and insanity supervened, and death finally relieved him of his malady.

Patients of the *second class* are generally found between the ages of eighteen and twenty-five. The habit begins a short time before the development of puberty, and continues until years of discretion are reached. The patient will tell you that every night he has emissions which are seldom accompanied by pleasurable sensations. Under the influence of strong excitement, he may have in the daytime emissions without erections. He is unable to complete sexual congress, intromission being prevented by feeble erections and premature expulsion of seminal fluid.

His mind continually dwells on his affliction, and he is unable to concentrate his attention on any other subject. All the minutiae of the dreams are continually before him. He suffers from vertigo, dimness of vision, backache, headache, loss of appetite, constipation, palpitation of the heart and great depression of spirits. He is restless at night and troubled with frequent nightmares. His sleep is broken, and when he rises in the morning he feels unrefreshed and tired out. His condition is made worse by exaggerating the symptoms, and continually dwelling upon them. His countenance is indicative of anxiety and physical weakness. There is a haggard look about

him which expresses the mental anguish in a striking manner. Sometimes patients of this class have a phthisical appearance without phthisis being present. If the genital organs are examined they will be found to have decreased in size. The penis is bent laterally. The veins are enlarged and appear prominently through the integumental covering of the organ. The scrotum is relaxed and cold. The testicles are small and hang much lower than they do in a healthy state. They are soft and tender on slight pressure. A varicose condition of the spermatic cord is almost always present. A sound introduced into the urethral canal will not give rise to any special unpleasant sensations until the prostatic portion is reached. At this point the patient will complain of intense pain, and a desire to urinate. The pain may be so severe as to make him cry out, and he will beg to be excused from any further examination. I regard this sign as indicative of excessive masturbation or of prolonged or inordinate sexual indulgence. Even when patients deny in the most emphatic manner that they have been guilty of the vice, the pain excited in the prostatic portion of the urethra by the sound assures me that they have spoken falsely. Occasionally the removal of the sound will be followed by a few drops of a viscid fluid, opaque in character which the patient calls semen. It is not semen, but merely the secretion from the gland pressed out by the contraction of the muscular fibres as the sound is withdrawn. Following the passage of the sound there is a scalding sensation during and after micturition, and frequent desire to micturate. At the termination of the act more of the secretion previously mentioned appears at the meatus. It is also present from straining at stool, horseback exercise, or other acts which cause the muscular fibres around the neck of the bladder to contract.

Though the health of the patient is impaired, and the will power weakened, there is usually enough intelligence and manhood left to appreciate the situation, and sufficient firmness left to make him cease from onanistic exercise, and the careful practitioner can generally promise a positive cure if the habit has been abandoned and all the hygienic and medicinal measures carried out as he has directed.

Patients of the *third class* are more numerous than either of the preceding. Every practitioner has met with numbers of such cases. There is nothing alarming in their condition, yet their mental distress calls for the same judicious care and management demanded by patients of the second class. Patients of this class commence masturbating at an early age, and continue it at greater or lesser intervals for five or six years. At sixteen or seventeen they are awakened to the dangers of the course they are pursuing, and they discontinue the habit at once, or indulge in it at much longer intervals of time, as little harm results. Two or three months subsequent to the cessation of the habit, involuntary seminal losses commence. At first they occur perhaps once in a week, but as the patient grows older and the sexual organs become the seat of increased excitement from associations with women, the emissions increase in number, while at the age of twenty, or thereabout, they occur three or four times each week; or, as is sometimes the case, two or even three emissions may occur in a single night, and then not again for seven or eight days, when the double emissions again appear. He is sometimes able to have sexual intercourse, but the intercourse is rarely satisfactory from sudden ejaculation. The involuntary emissions cease while the passions are indulged in a natural manner, but they re-appear when the intercourse has ceased. The patient soon becomes very

nervous about his health. Every trouble is magnified. Every little nervous sensation about the genitals is magnified into something fatal to his virility. His desires are stronger than ever, he is easily excited by the presence of a pretty woman, and he can scarcely help showing the lust of his mind. The genital organs are relaxed, but the penis and testicles are of a normal size. The passage of the sound produces a little pain, not nearly so intense, however, as in the cases previously mentioned. There is nothing in the countenance of the person to show that he has ever indulged in any self-pollution, or was subject to involuntary seminal losses. In light-complexioned persons there may be a dark ring around the eyes, but as this is also a sign accompanying over-indulgence in sexual intercourse, it has no special significance.

These patients are active, but they are often troubled with palpitation of the heart. They are also apt to be short-winded after exercise of an active nature.

The mental distress is the worst symptom they exhibit, and the hardest to get rid of. All the evils that it is possible to befall them are constantly talked about. They read everything written on the subject of spermatorrhœa and impotence and have found in themselves every symptom of the worst cases mentioned. Partial, and even complete, loss of virility may finally ensue.

All cases of this class can be cured in a short space of time, and with very little trouble. In fact many of them recover without any medical treatment whatever.

Patients belonging to the *fourth class* are found more frequently among married than among single men. I will take the case first of the single man : He has not indulged to excess in sexual intercourse, nor has he ever masturbated. His habits

are usually regular. He has a highly developed nervous organization, but usually enjoys excellent health. When his genital organs are matured and his venereal sense fully developed, seminal emissions occur once, or perhaps twice in a fortnight. He becomes intensely excited when he thinks of sexual intercourse, and when his desires culminate he finds that his great nervous excitement prevents the accomplishment of the act. The depression of mind that follows the first failure makes failure certain in the second attempt. He becomes the victim of mental impotence, and in a state of great depression consults his physician. His first visit to the physician will either help to fix the disease upon him for months or will secure him from any further anxiety.

The married patient, like the preceding, has not been guilty of excesses. He has a highly developed nervous organization. During the occurrence of some trouble which depresses his nervous system, he fails in the performance of his sexual function. The first failure is the progenitor of a series of failures. He imagines that continence will do him good. The only result from this procedure is the development of seminal emissions which, in the course of time, may be so frequent as to undermine the patient's health.

It is only in rare instances that the physician can obtain from patients of this class any history of masturbation or sexual excess. Local and general examinations would give negative results on that point. Yet their condition is very bad. Their mental anxiety is great; indeed, it may be as distressing as in patients of the second class. The mind alone is at fault, and mental influence brought to bear upon them in a judicious manner is the essential part of the treatment. With judicious management they usually recover.

## CHAPTER XII.

### CONSTITUTIONAL TREATMENT OF SPERMATORRHœA, IMPOTENCE, AND ALLIED DISEASES.

General Debility, a Leading Feature in the Majority of cases—A Special diet necessary for each patient—How to select a suitable diet—Cases in which the number of meals should be increased—Condition of the Genital Organs not to be considered in selecting food—Nutritious Articles not to be set aside because they have a tendency to excite the Genitals—Eggs, Oysters, Clams, Raw Beef, Broths, Gluten, Cracked Wheat, Cream, Milk, etc., Essential Articles—Digestible Salads—Method of preparing Raw Beef—Quantity of food for each meal—Incompatible mixtures of food in the stomach, and their effects—Rules for the selection of compatibles—Food that should be eaten—Food that should be excluded from the bill of fare—Meat not to be eaten with milk—Other Incompatibles—No lard or pork to be used in cooking—Mild wines permitted in the treatment.

Nearly every case of spermatorrhœa and impotence exhibits marked evidence of depraved nutrition. Constitutional treatment is consequently as much of a necessity as local treatment. Indeed many cases may be cured by constitutional treatment alone, by strict attention to all the known hygienic rules, by a nutritious regimen, and moderate use of tonic medicines. When the organs which regulate absorption and assimilation are brought to a healthy working standard, then, and only then is there a prospect of a favorable issue. Therapeutical agents which regulate the action of the alimentary canal, skin and kidneys, and give tone to the system, are of much value in the treatment of spermatorrhœa and impotence, but they too can sometimes be dispensed with, if nutritious food is carefully and judiciously selected. A suitable diet regulated by the

wants of the patient will always do more towards accomplishing a cure than will the best selected medicinal agent, without such attention to diet.

A few questions from the physician will soon determine the variety of food which will agree or disagree with the patient. Having obtained this important information as the first regular step in the course of treatment, it will be well to exclude from the mind any anxiety respecting the morbid condition of the genital organs, or the effects which the food will have on the secretions of these organs, or the changes it may excite in their working capacity. The aim should be to build up the patient irrespective of every other object. I am particular in impressing this point because some authorities condemn articles of food on account of their supposed tendency to increase seminal emissions. They believe in excluding everything which displays a tendency to stimulate the secretion of the testicles or promote erections. Now the most nutritious elements of food effect this result. In fact everything that increases the vitality of the patient stimulates and gives tone to the genital organs. The stimulation is not abnormal. It is not an increase in the already existing irritation. It is a development of a normal power, a renewal of strength and functional activity, which is the end and aim of all methods of treatment. And it is of little consequence that a few additional emissions occur at the commencement. As the case progresses and approaches a favorable termination the number of emissions will be much diminished. No greater mistake has ever been made in the treatment of spermatorrhœa and impotence than to recommend a diet or a medicine which will not stimulate or give tone to the organs of procreation. Such depleting diet is ordered for the same reason that bromide of potassium is given, viz., to diminish

the ejaculations of semen, to relieve a symptom at the expense of the vitality of the patient.

Eggs, oysters, milk, cream, raw beef, chicken, strong broths, thickened with barley, cracked wheat, oat meal, etc., should be ordered to be taken frequently and in such quantities as will suit the digestive force of the patient. One person can assimilate a much larger quantity of food than another, and it is safe to assume that whenever uncomfortable sensations are excited in the stomach by a meal that either the quantity of food is too great or that it is not the kind of food which is suitable for the patient. In cases where the vitality is much impaired, as in the first two classes mentioned in the previous chapter, it will not do to confine the patient to the ordinary system of three meals each day. The stomach will not prepare such an amount for absorption, and much of the food taken will pass out undigested or unchanged. Instead of three large meals in twenty-four hours, the patient should have six or seven small ones. Dividing the eating hours in this way the stomach will be enabled to take up far more of the nutritive elements of the food than in any other way.

For several years I have pursued about the same plan of treatment in these cases as I do in phthisis, giving only that variety of food which can best be assimilated. There are many different articles of diet taken into the stomach which are entirely incompatible, and which, by the peculiar changes produced in each other by the digestive reagents, and their own peculiar ingredients, retard, rather than assist, digestion and assimilation. With a little care, both the quality and quantity of food best suited to the peculiar needs of the patient are easily ascertained, and the patient is then put in the best possible condition to begin his fight for restoration to health. Let

us see first what kind of food should not be eaten, and what ingredients employed in cooking should be left out.

Neither lard nor pork should be used in cooking. Fresh beef suet, or melted butter, should be employed instead. Of the two, the beef suet is preferable to the butter. Smoked food of all kinds is injurious. Fresh bread, pastries, hot puddings, are also to be left from the bill of fare. Fried oysters should be avoided. Any fried food is objectionable. Salt fish and meats, pickles, olives, cheese, and bananas should not be eaten. Milk and flesh food should never be taken at the same time. Two hours should elapse after a meal where meat of any kind is served, before milk is taken. When fresh meat is served, butter on bread or otherwise is prohibited. No oily substance of any kind should be employed in cooking a steak, or in making a gravy for it. It should be broiled only. All soups should be cooked the day before they are used, and all the fat skimmed off before serving. All fruit eaten should be cooked, with the exception of oranges and grapes.

Mustard may be used *ad libitum* with all kinds of meats.

Salads may be eaten at any meal. Among the salads which, curiously enough, agree with delicate stomachs, is a salad made from the inner leaves of red cabbage, dressed with oil, salt, pepper, and vinegar if desired. The oil must be absolutely pure olive oil, and should be put on the leaves first. Ordinary field lettuce, carefully dressed, is also a desirable article of diet. Potato salad may be eaten with lunch. If the onions in it are objectionable they may be left out, and celery salt substituted. Another salad that suits some may be made of good Florida oranges. Take good oranges, peel and slice and free from seeds. Add oil and salt and a quantity of cayenne pepper.

The best bread to use is Graham bread, and it should be at least one day old before being eaten. Pumpernickle bread is also good for a change.

Jellies contain very little that is nourishing, and as a rule should not be used. There is one exception, however, to this rule, and that is cranberry jelly; this is both nutritious and palatable, and assists the digestive process.

Boiled cereals of all varieties may be eaten cold or warm, with sweet cream, or syrups that are made of melted cane, or maple sugar.

Beef and mutton are preferable to lamb or veal—the latter may be left out of the bill of fare.

Fresh fish of all varieties eaten with rice or other boiled cereals, can be generally easily digested by the most delicate stomach.

As a sample of the method by which some ordinary forms of solid food may be prepared so as to suit the digestive apparatus of a person much debilitated by excess or disease, I give the following: If mutton or lamb chops or chicken is desirable, the chops or the chicken should be put in the pan, with just enough water to cover them. Cook thoroughly, in the meantime sprinkle a little salt and pepper. Take out the chops, and add to the liquid, butter, and a little flour, and curry powder. Boil some rice in salted water, and add to this the gravy in the dish. Chops cooked in this manner form a most savory, palatable, and digestible dish.

I am accustomed to order the first meal to be taken in the morning as early as half-past six or seven o'clock, even if the patient does not rise to eat it, but takes it in bed. I do this because the second sleep in the early morning, if allowed to run on to eight or nine without disturbance, is liable to make a

marked difference in the feeling of congestion which most of these patients experience about their genitals, at that time, especially if they have not had an emission during the night. If they wake early, and get a reasonably good meal, and their circulation is equalized, there is less tendency to local congestion. The morning meal may consist of clam stew, a very palatable article for weak stomachs, and a couple of soft boiled eggs, with a plate of wheaten grits and cream, or oatmeal and cream, and a pint of milk, fresh from the cow. The watered milk will not answer in these cases. Sometimes I order a raw egg dropped in iced water, or iced milk, before the cereals, with perhaps a cup of weak coffee, or English breakfast tea. If chops are desirable, I order them as above, to be preceded by oranges or other suitable fruits. Let the patient take tea or coffee instead of milk or plain water.

After breakfast a brisk walk should be taken for about half an hour. If the weather is bad the walking can be done indoors. If much fatigue is experienced from half an hour's walk, the time may be shortened.

At eleven A. M. the patient can have one or two raw beef sandwiches, with a cup of weak tea or hot milk. The raw beef should be carefully prepared by taking a tender steak, freeing it from fat, and then scraping it with a knife until the red pulp of the meat is separated from its cellular tissue. This pulp includes *all* the nutritious elements of the beef, and contains nothing that is not easily digested. Indeed it is the most nutritious and most easily digested article of diet that I am acquainted with. When prepared with a little salt it is exceedingly palatable. There is nothing in its taste then, to remind the patient of unprepared raw beef. There is some of the taste of raw beef in badly cooked meat, none in the really raw

meat. I have given it to infants suffering from cholera infantum, with good effect. It is often retained in these cases when food in any other form is vomited.

If the patient cannot take this meat in the form of a sandwich, it can be given in teaspoonful doses five or six times each day.

At two o'clock the heaviest meal of the day is to be taken. A full meal in the evening is not admissible. The dinner may consist of mutton broth, thickened with barley or pea-soup, with some of the marrow of the beef bones mixed with it, followed by chops or broiled chicken or beef. Broiled meats are always to be preferred. Fried fish may be substituted for meat or added to the bill of fare. Vegetables, such as potatoes, beans, peas and spinach, are generally beneficial. Asparagus, beets, onions and carrots are not to be used unless the patient has some special desire for them. For dessert, rice or tapioca pudding will be necessary. All the ordinary forms of pastry should be excluded. Fruit, such as apples, pears and peaches are to be indulged in sparingly. When the stomach has regained some of its lost tone, they may be given in greater quantities.

With the dinner, a small bottle of claret or a glass of sherry may be taken. I am aware that in prescribing any form of of alcoholic stimulus, I am running counter to the advice of many in the profession, who consider total abstinence from all stimulants a desideratum in the treatment of every form of spermatorrhœa. They oppose the use of stimulants for the same reason that they object to oysters and other articles of diet which are said to increase the activity of the genital apparatus. My experience, however, has taught me that a mild stimulant in the form of claret, taken at dinner or at intervals during the afternoon, is an indispensable adjuvant in the treatment of the patients belonging to the first two classes of cases.

It assists digestion, gives tone to the stomach, and limits the nervous depression ; and owing to its astringency it must have some effect in diminishing the secretion of the glands connected with the genitals. I have never seen it display a tendency to increase either the nocturnal or diurnal pollutions. Even if the emissions were temporarily increased by its use I should not hesitate to give it, for I regard its assistance in strengthening the patient as more than compensating for any seminal losses which its general stimulating action might produce. There are other drinks which may be used with benefit besides claret. Pilsner lager is often relished and readily digested. Apollinaris and imported seltzers may also be employed instead of plain water. Sweet cider is not objectionable. Beef tea made in a bottle, bouillion, and hot milk are both pleasant and nutritious.

The lightest meal of the day should be taken in the evening. Nothing in the shape of food should be taken after that meal unless the patient is in a very low state. The meal should be served at six, in order that the principal part of the digestive process may be completed before the patient retires to bed.

For supper the patient may eat a few raw oysters, stewed clams, a little cold chicken or boiled rice. A cup of tea and toast will suffice for many, and will be much better than a heavier meal. Some get along very well with bread and a glass of milk for the evening meal. If the milk seems to disagree with the stomach, a tablespoonful or two of lime water should be added to the goblet of it before using. It makes no difference whether the sensation of hunger ceases or not from the food taken into the stomach. The quantity of food must be less than that taken at any other period of the day. A patient will sleep better with the stomach comparatively empty, than

with a full meal. A hearty meal in the evening makes the digestive function active and continues it into the hours necessary for sleep, and is consequently provocative of unpleasant dreams, restlessness, insomnia, and seminal emissions.

Liquids of all kinds should be abstained from after the six o'clock meal, unless the patient be very feverish and thirsty. The less water the bladder has to throw off during the night the better. When the bladder is distended the congestion about the prostate and other parts is increased, and emissions are more liable to take place. If a drink is necessary, a cup of hot milk or hot water will be found to answer. It excites the action of the perspiratory glands, takes some of the work away from the bladder, and assists in relieving congestion.

All spices or spiced food is apt to exert an injurious effect in spermatorrhœa. Spices of all kinds stimulate the genital organs, without giving any nourishment to the system.

Coffee is more injurious than tea. In many cases coffee may have to be dispensed with altogether, but, as before stated, it may be given largely diluted. When there is a choice the preference should be given to tea.

## CHAPTER XIII.

### CONSTITUTIONAL TREATMENT OF SPERMATORRHœA, IMPOTENCE, AND ALLIED DISEASES.

Condition of the Bowels in Spermatorrhœa—Scanty Secretion—Diminished Peristaltic Action—Why Cathartics are Contra-indicated—Effects of Constipation in Increasing the Number of Seminal Emissions—Semen Evacuated at Stool—Cases in which Small Doses of Calomel may be Employed—Action of Belladonna and Physostigma on the Bowels—Injections of Oil into the Rectum—Cold Water Enemata the Best Remedy for Constipation in Spermatorrhœa—Local Effects of the Injection—Cold Water Bathing—Various Methods of Employing Cold Water in the Treatment of Spermatorrhœa and Impotence—Cold Sponge Bath—Sitz Bath—Shower Bath—Rubbing Bath—Cold Douche Bath—Sea Bathing—Temperature of Bath for Weak and Nervous Patients—Local and General Effects of the Bath—Sleep and Exercise.

All patients suffering from spermatorrhœa and impotence are likewise subject to constipation. The disease is characterized by a lack of secretion in the intestinal glands and by diminished peristaltic action of the intestinal muscular fibres. As a consequence the fecal evacuations are extremely hard and infrequent. They are usually accompanied by violent straining efforts which cause great distress. In many instances the fecal matter accumulates in large quantities in the rectum, presses upon the vesiculæ seminales and prostate gland, occasioning considerable irritation. This irritation invariably increases the frequency of the seminal emissions.

This fecal mass must be removed, and the lethargic condition of the bowels changed to an active and normal one, at the beginning of the treatment. Healthy and regular fecal evacua-

tions must be promoted, or the remedies for the cure of the original disease will be almost useless. For patients belonging to the first and second classes, cathartics are not admissible. For patients belonging to the third and fourth classes, mild cathartics are generally beneficial. When cathartics are administered to debilitated patients, they increase the relaxation which already obtains, and diminish the strength. To persons who can bear the medicine, and who are subject to biliary attacks, I usually prescribe eight grains of calomel or double doses of two grains. Each two grain powder may be taken at intervals of five hours. The morning after, a glass or two of Kissengen (or any other cathartic water) may be taken, the Kissengen, however, being the most effective and desirable. The mineral water should be continued for three or four weeks, in sufficient quantities to produce regular evacuations from the alimentary canal. It is essential to establish the *habit* of moving the bowels every morning. And the patient should attempt to evacuate the contents of the intestines every day at a certain hour, whether the inclination to do so is present or not. If this plan is continued, good results will certainly follow.

In some cases, I found compound rhubarb pills to act with excellent effect, being useful for patients belonging to the third and fourth classes. It is not necessary to give a full cathartic dose of these pills. One pill each night, or every other night, will gradually bring about the desired effect. If one pill at night should produce more than one evacuation in the morning, half a pill may be administered instead. A pill composed of belladonna, physostigma and nux vomica may be employed with great advantage. (See page 244.)

Another excellent method of increasing the alvine evacua-

tions, is to inject before retiring an ounce or two ounces of sweet oil. The oil generally remains in the rectum all night, without producing any unpleasant sensations. The bowels are usually emptied in the morning. The most satisfactory method of emptying the bowels in all cases where there is general debility, is to administer an enema of cold water every morning after breakfast. From one to two pints will be sufficient. The nozzle of the syringe should be warmed and oiled, and the water injected slowly and carefully; the injections should be continued until the bowels acquire the habit of moving daily.

The cold water injection may occasion unpleasant sensations to the patient unaccustomed to its use, and it may even cause considerable pain in the perineum and around the base of the bladder. This, however, should not deter the patient from a faithful trial of the remedy. For, usually, after the fourth or fifth injection all disagreeable feelings cease.

A twofold effect is usually obtained from these injections of cold water. The bowels are emptied in a natural manner without any resulting weakness, and the congestion around the vesiculæ seminales and neck of the bladder is immediately diminished. The stream of cold water thrown from the syringe impinges on the parts mentioned, the dilated bloodvessels contract, thereby relieving the engorgement, and producing a more natural circulation in all the tissues of the parts concerned. Coincident with this decreased congestion there is necessarily less irritability of the nerves and a diminution in the secretions of the glands which furnish materials for the seminal fluid. The emissions in consequence become less frequent. Besides this, the muscular fibres connected with the prostate derive more tone from the cold water. And as muscular contraction has much to do with the erectile power, this added tonicity develops

greater permanency in the erection. I have known these injections in three cases to produce natural erections without the employment of any other remedial agent.

All these agents are assisted by friction over the bowels, with the hand or with a brush. If the hand is employed the movement is made from the cæcum upwards to the ribs, then across over the transverse colon and then down in the course of the descending colon and sigmoid flexure. The amount of pressure made must depend on the sensitiveness of the patient ; as a rule it should be very firm. These movements may be repeated for half an hour at a time, in the morning and evening, and may be supplemented by a general rubbing of the whole body.

#### COLD WATER BATHING.

The use of water as a remedial agent has of late years become universal. The indiscriminate use resulting from the first hydropathic fever has been replaced by systematic and scientific methods of application which have been obtained by a practical study of its local and constitutional effects on the economy. The therapeutical action of cold water is well understood, and its efficacy in many disorders satisfactorily established. Especially in the treatment of spermatorrhœa and impotence it has been found to be a valuable and indispensable adjuvant. It may be employed in these affections both locally and generally in the form of

Cold sponge baths.

- “ Sitz baths.
- “ Shower baths.
- “ Douches.
- “ Rubbing.

I usually commence treatment with the cold sponge bath. It should be taken in the morning upon getting out of bed. If the patient is very weak, the bath is not admissible. Re-action is slow in debilitated persons. They feel chilly and uncomfortable, because much of their animal heat is abstracted by the cold water, and their heat-making power is not sufficient to make up for the loss. Much discrimination therefore is necessary in prescribing the bath. The majority, however, of patients suffering from spermatorrhœa react remarkably well after the bath.

The water of the first bath should have a temperature of about sixty degrees, and should be of a three minutes' duration. Subsequently, baths may be taken in water below sixty, of five minutes' duration. The patient prepared for the bath stands by the side of the tub on a warm rug and after dipping the sponge in the cold water, rubs it rapidly over the face and neck, drenching the parts thoroughly four or five times. Then the arms from the shoulders down receive the same application. When the arms are finished the patient should get into the bath-tub and while standing up apply the sponge to every part of the lower extremities. The next step is to sit down in the water and thoroughly sponge the surface of the chest, abdomen and spinal column. By pressing the wet sponge on the back of the neck, the whole back is reached by the water. There or four repetitions of this process will be sufficient to complete the bath.

After the patient leaves the bath he should be rubbed with a dry coarse towel until the integument is dry and red. The patient should himself apply the surface friction, as this necessitates considerable action of the muscles, conduces to the development of caloric, and ensures reaction. Even where

there is a tendency to chilliness the brisk rubbing by the patient will prevent any unpleasant termination to the bath.

In case the patient's debility prevents him from taking the bath as directed, the sponging may be done in bed, or a towel may be used instead of the sponge. The sponge or towel is first applied to the face and neck. When these parts are dried, each arm should be washed and dried. Then the lower extremities, abdomen, throat and back receive the same application and rubbing as the head and neck. Sometimes, when the circulation is very bad and the hands and feet are cold, I am in the habit of applying a flannel saturated with alcohol to the whole integument as soon as the water bath has terminated and the skin is dry.

These applications of cold water at first produce contraction of the capillary bloodvessels and more rapid circulation of the blood. When reaction takes place, there is a determination of blood to the integument which increases the secreting and excreting functions of the skin and assists in relieving internal congestions. The muscular tone is increased and nervous irritability removed. The patient feels stronger and his mind is clearer after the bath than before it, and he is better fitted in every way to attend to daily work.

The sitz bath likewise is productive of excellent results when properly employed in the treatment of spermatorrhœa and impotence. The bath is taken in a zinc tub shaped somewhat like an arm-chair without legs and having a large back for the patient to rest against while he sits in the water, with his lower limbs resting on the floor outside of the bath. The water at sixty degrees should fill one-third of the tub, and the patient's shoulders, arms and legs are covered with blankets or other material which will keep the body comfortably

warm. The water covers the upper half of the thighs, the genital organs and the lower half of the abdomen.

The length of time the patient should remain in the bath must be governed entirely by the stage of the disease and the general condition of the patient. As sound judgment must be exercised in the employment of this bath as in the use of any other therapeutical agent. For the first class of patients one bath at night before retiring will be sufficient if the cold sponge bath was taken in the morning. If not, two baths, with an interval of two hours between will be necessary. Each bath must not exceed five minutes in duration. For patients of the second class one *sitz* bath of eight minutes duration will be necessary every four hours; the last bath should be taken at bed-time. These frequent *sitz* baths have a remarkable effect in removing chronic distension of the bloodvessels within and without the pelvic cavity. A direct tonic and stimulating effect is exerted upon the genital organs, which is soon felt by the patient, and the frequent employment of the bath continues these effects. Each one assists in keeping up the contraction of the bloodvessels, prevents further engorgement, so that in the course of time they resume their natural caliber and no more blood circulates in the organs than is needed for their functional activity.

For patients belonging to the third and fourth class a *sitz* bath each night of fifteen minutes' duration, in water at the same temperature as previously is advised. *Sitz* baths continued this length of time have more of a sedative and derivative action than the five-minute baths. Their action extends to remote organs; they relieve congestion of the brain to some extent, and promote sleep. They generally relieve the insomnia of patients suffering from *spermatorrhœa* when other remedies

fail. The alimentary canal also is affected by the bath. The constipation is removed and healthy and regular evacuations are the result.

Gully, who has made a specialty of the water treatment, and who has had an immense experience says: "The sitz bath is admirably adapted to the treatment of active irritations, as well as conditions of obstruction, so that it is applicable in almost all cases of chronic, as it is in very many acute, diseases. The sitz bath is used either as a tonic or a derivative. In the former case it is taken cold and for a time varying from five to fifteen minutes, seldom exceeding the latter period. The rationale of its operation in this character is sufficiently simple. The stimulus of the cold causes the bloodvessels of the parts and neighborhood to which the water is applied to contract, and thereby rid themselves of any excess of blood, and as this stimulus has not been carried to any great extent, there is very little subsequent return of relaxation in those vessels; still there is some, and it is for this reason that it becomes necessary to apply the stimulus again after short intervals; short sitz baths always require frequent repetition, sometimes as often as six or seven times in the twenty-four hours. It will appear from the above that the short or tonic sitz bath is applicable in all cases where there is an enfeebled or congested state of the parts contained within the hips, for instance, in excessive menstruation, leucorrhœa, loss of muscular tone and protrusion of the lower gut.

"The temperature at which it is fit to take the sitz bath is important. Its tonic effect is best, and indeed only obtained by the cold degrees; that is under sixty degrees. . . . Patients in a very low condition of vital activity, but in whom it is de-

sirable to produce derivation of blood to the lower organs of digestion, should in the first instance be submitted to water of a tepid temperature or nearly so, and the degree should be lowered as the strength increases. The amount of derivation in such an event is not so great nor permanent as when water at forty or fifty degrees is used ; but a judicious practitioner will suit his remedies to his patients' power and not go by blind rules. In applying the sitz bath in its tonic character it is desirable to use it often and this because the relaxed bloodvessels of the viscera of the pelvis may not have time to fall again into an exhausted state and re-admit fresh blood. It is chiefly in its derivative action that it produces a lowering effect, and is, therefore, adapted for certain states of active irritation of the digestive viscera and head. By such a bath the pulse is reduced in rapidity and hardness to an extent that many would scarcely credit. . . . Both the long and the short sitz baths have the effect of quieting the brain and nervous system. In sleepless nights the best opiate that can be taken is a cold sitz bath of four or five minutes' duration, and the sound sleep that certainly follows is well worth the exertion of the resolution to get up and take it. I have repeatedly known patients to fall asleep in a cold sitz bath of long duration, and they always pronounced it a refreshing sleep. Both the long and the short sitz bath are beneficial in removing headaches of a nervous or bilious kind, in staying vomiting, flatulent spasms, etc. When used to open the bowels it is well to rub the abdomen with the wet hand during the last eight or ten minutes of the bath."

The sitz bath exercises a good effect on the erectile tissues of the genitals. After the first dozen baths the erections last longer and approximate more nearly to a healthy standard. The emissions are diminished and the uneasy sensations

in the perineum and urethral canal may completely pass away.

The only contra-indication to the use of the bath is the continuance of chilly sensations after the patient retires to bed, and the occurrence of a pain over the sacral region which is aggravated by walking. These abnormal symptoms are due to excessive use of the cold water. In such cases the number of baths may be reduced to three in the week, and the temperature of the water may be increased to seventy degrees. As soon as the patient bears this without uneasiness the temperature may be lowered two or three degrees at a time until sixty is again reached.

*Shower Baths* are only useful in a few cases. In previous years I prescribed them in almost every case of spermatorrhœa that came under my care. But I soon found that the over excitation of the nervous system produced by them more than counterbalanced their tonic effect. Some of these patients after taking the bath could not sit still or rest in one position for more than three minutes at a time. And this restlessness often lasted during the entire forenoon. They complained of uncomfortable sensations on the spinal column, described by some of them as a creeping feeling, by others as a pricking or tingling sensation. One case in particular may be mentioned as exhibiting this peculiar effect. The patient had suffered from spermatorrhœa for four years. He was not particularly nervous or frightened as to his condition. The first shower bath was administered in the evening and lasted three minutes. Almost as soon as he had retired to bed he felt as if myriads of ants were crawling up and down the spinal column. Ice cold spots the size of a pea were felt on the lower extremities. He became very much frightened and passed an uncomfortable

and sleepless night. Next evening the same results followed the bath. He then allowed an interval of three days to pass before he repeated the bath. This one was taken in the morning upon getting out of bed. An hour afterwards the same creeping sensations came on accompanied by great restlessness and inability to remain long in one position. The bath was finally discontinued and the cold sponge and sitz bath employed. With these he suffered no discomfort whatever.

In consequence of these peculiar results and also because of the fact that reaction is very much protracted after these baths I have discontinued them in all cases belonging to the first three classes. With patients belonging to the fourth class we get better results. These persons are often full-blooded and in the enjoyment of average good health with the one exception of marked impotence. The "stirring up" which the cold shower occasions gives the patient renewed energy, awakens him for a time from his listlessness and depression and conduces to a healthy mental action, which is an important result for the physician to secure.

The *cold douche* is recommended by hydropaths as an efficient remedy in spermatorrhœa. I have had but little experience with this variety of bath, because I have found the others previously spoken of to answer all purposes. The cold douche may be either general or local. In using the former, the patient sits in the bath tub while an assistant pours cold water on his body from a pitcher held some distance above the patient. Some prefer a steady stream from a rubber tube or pipe to the interrupted stream from the pitcher. This bath is similar in its effects to the shower bath.

The local douche is often beneficial in diminishing the number of emissions and giving tone to the genitals. The simplest

way to give this bath is for the patient to sit on the edge of the bath tub with his limbs inside, and, by means of a rubber pipe with a suitable nozzle, he directs the stream of water to the perineum and genital organs. This local bath is best taken at bed-time or before indulging in sexual intercourse.

Some authorities speak highly of the rubbing or dripping sheet bath in the diseases under consideration. Gully says with reference to it:—"The dripping sheet is generally used as a preparative process for the skin, if that organ has been hitherto unaccustomed to the impression of water below its own temperature, and the shock is considerably modified by the attendant friction. The bloodvessels of the skin contract in the first instance, and subsequently relax, admitting more blood into their calibre,—a double action, which is reiterated by the friction, until a good amount of blood is fixed in the skin, to be maintained by subsequent exercise. But besides this, the stimulating impression made upon the myriads of nerves of animal life spread over the skin, and derived from the brain and spinal cord, modifies the circulation in these last, and, through them, affects the vital energies of the viscera. It is in this manner that it takes off languor, gives alacrity to mind and limb, clears away intellectual and moral cloudiness, at the same time that it generates appetite, removes thirst, causes expulsion of flatulence, etc. More than this, its repeated and frequent use will reduce some of the symptoms of very intense derangement of the animal nervous system, such as attacks of tic and violent spasms of the limbs and trunk.

"When speaking of the wet-sheet packing, I have alluded to the favorable condition in which it placed the skin and viscera for the best reaction on the subsequent process of the dripping sheet. Were the patient to remain just as he comes from the

packing, his skin would be liable to take cold from the operation of the air, the stimulus of which is not strong enough to ensure sufficient reaction. But when the dripping sheet, with the friction, comes to play upon the skin with its organic energy accumulated in the packing, the reaction is great, the blood remains in the skin, and its presence prevents the taking of cold. Hence it, or some cognate process, is indispensable after the wet-sheet packing. For this purpose, it is sometimes prudent, in cases of great organic feebleness, to commence with a tepid sheet, and only gradually reach the cold temperature. But when it is used alone, for the purpose of refreshing the animal nerves and the brain, or for reducing their painful or spasmodic affections, it should always be cold, and the accompanying friction long and continued. Six or eight sheets in succession are sometimes thus administered. To very delicate persons I often apply, in the first instance, only friction of the trunk and arms with a wet towel, dry and dress those parts, and then have the legs rubbed in like manner. Reaction and comfortable sensation may thus be obtained, which would be wanting were an entire sheet thrown at once over the entire body. In persons with apoplectic heads, such a commencement is likewise advisable. As the dripping sheet, although less stimulant, answers in some degree the objects of the shallow bath presently to be mentioned, it is a good substitute for it when that bath is difficult to obtain, as in traveling. If there be feverish pulse and heat, the dripping sheet taken at bed-time induces sleep, by relieving the brain from the irritation of the skin. But if there be no signs of feverishness, it will rather prevent sleep by exciting the skin, which then excites the brain."

## EXERCISE.

Active exercise is an indispensable adjunct in the treatment of all forms of genital weakness. It promotes digestion, and assists in relieving the congested condition of all the viscera. Whatever exercise is advised for the patient should be taken at various intervals during the day, and should not be crowded on the patient at one time. From two to three hours after each meal is the best time for exercise. The amount of it must be determined by the strength of the patient. If he should be too weak to walk or ride, manipulation and friction of the surface of the body should be given twice each day by a competent manipulator engaged for the purpose. This passive exercise will answer all purposes until the patient regains sufficient strength to exercise himself.

Boxing is an excellent indoor exercise. It brings into play every muscle of the body. It keeps the mind active as well as the muscles. It stimulates the circulation in every part and increases the strength of the patient. Exercise in boxing, even if carried to the extent of fatiguing the patient, is nevertheless beneficial.

Dumb bells and Indian clubs are also serviceable means of exercise. They may be used four or five times each day, for about fifteen minutes, without injury. The benefit derived from this employment is not, however, so great as that derived from boxing.

Outdoor exercise should never be omitted. Walking, running, rowing, riding are all excellent in their proper time and place. Two hours after breakfast is an excellent time to walk; and a brisk walk of from half an hour to an hour, even if the patient is fatigued by it, will produce good results.

Horseback exercise is good when there is not too much irritation of the genital organs. In irritable cases I have known the exercise to increase the number of seminal losses. The cases that are benefited by it are those whose trouble is chiefly mental, as it is in the fourth class of cases. Indeed, in all persons in whom the mental trouble preponderates over the local trouble in the genitals, horseback exercise will do a vast amount of good.

#### SLEEP.

The sleeping apartment of a patient suffering from spermatorrhœa should be large and well ventilated. The windows of the room should be kept open night and day. The free circulation of air is always to be continued without respect to the peculiar opinions on the subject entertained by the patient or his friends. The windows should be closed only when the baths are taken.

A feather bed is not so good to sleep on as a hard hair mattress. The covering of the bed should be sufficient to prevent the patient from taking cold, but not enough to induce perspiration. Linen sheets are preferable to cotton in summer and winter. Ten o'clock is a good hour for retiring. The patient should rise at six o'clock in the morning or earlier, even if he has passed a sleepless night. It is best to rise and bathe and eat. If further sleep is necessary, it can be obtained after the exercise prescribed by the physician has been taken.

It is always advisable to sleep on the right or left side. The former is the best. When the patient lies on the back, emissions are more apt to occur. To obviate the tendency to lie on the back, an ordinary wooden reel maintained in place over the lumbar region by a cord can be used to good purpose.

## CHAPTER XIV.

### TREATMENT OF SPERMATORRHOEA AND IMPOTENCE AND ALLIED DISORDERS (CONTINUED.)

Indications for the use of Tonic Medicines—Cases in which they are beneficial—Reasons for their Discontinuance—Effects of Strychnia on the Spinal Cord—Combination of Strychnia, Iron, Quinia and Glycerine—Tonics and Nerve Stimulants in Nervous Depression—Preparations to be employed when there is obstinate Constipation, Palpitation of the Heart, Vertigo, etc.—Employment of Arsenic, Iron, Nux Vomica, Ergot and Quinia—Aphrodisiacs—Special Indications for their Employment—Classes of Patients benefited by their use—When they should be discontinued—Peculiar effects of Phosphorus on the Nervous System and Genital Organs—Dangers connected with its administration—Compound phosphorus Pills—Cantharides as an Aphrodisiac—Best mode of administration—Combination of Ergot, Nux Vomica and Capsicum—Effect of Cannabis Indica, Ergot, Nux Vomica, Quinia—Sanguinaria, Stillingia, Water Pepper, Damiana, etc.—Homœopathic Remedies.

Tonic medicines are indispensable in nearly all cases of spermatorrhœa and impotence. Tonics which combine a stimulating effect on the genital organs with a general restorative influence, can be more advantageously employed than the simple tonics; or, simple tonics may be combined with medicines whose action is specially exerted upon the genital functions. All medicinal agents lose their effect when continued for any great length of time. It is well, therefore, to change from one preparation to another as soon as improvement ceases. Five weeks is a sufficient length of time for the employment of any one medicine or combination of medicines.

Again, certain preparations act beneficially in one case and obtain negative results in another. They may suit the stomach

of one patient and disorder the digestive functions of another. Hence, the necessity for a careful discriminating selection in all cases. When medicines disagree with a patient for more than a couple of days they should be discontinued and another set of remedies substituted. Nothing is gained by persevering in the use of a drug obnoxious to the patient, or failing to do its work within a reasonable period.

One of the best tonic combinations for cases of spermatorrhœa and impotence is the following:—

R. Strychniæ Sulphas.	.	.	.	gr. i.
Quiniæ Sulphas.	.	.	.	ʒ ss.
Tinct. Ferri Chloridi	.	.	.	ʒ ss.
Glycerinæ	.	.	.	ʒ iv.

Misce.

Half teaspoonful in a wine-glass of water four times each day. To be taken before meals if it does not disorder the stomach.

This combination has a local as well as a general effect. The strychnia, by sending a greater amount of blood to the spinal cord, stimulates the action of the nerves given off to the genital organs, and gives tone to the muscular fibres concerned in erection. The preparation of iron increases the quantity of red globules in the blood and exerts a special tonic action on the genito-urinary apparatus. The quinine is a general tonic and stimulant, and the glycerine, besides being a pleasant vehicle for the bitter drugs, assists the stomach digestion.

When there is general nervousness and depression of spirits, a nervous stimulant should be added to the tonic remedies. The following combination containing phosphorus in connection with the iron and chloric ether, will be found to produce good results:—

R.	Strychniæ Sulphas.	.	.	.	gr i.
	Quiniæ Sulphas.	.	.	.	3 ss.
	Ferri Pyrophosphat.	.	.	.	3 ii.
	Spts Chloroformi	.	.	.	3 iii.
	Glycerinæ	.	.	.	3 iv.

Misce.

One teaspoonful in a wine-glass of water four times each day.

In cases where flatulence is a common and painful symptom the following preparation will often answer :—

R.	Tinct. Nucis Vomicæ	.	.	.	3 ii.
	Tinct. Capsici	.	.	.	
	Tinct. Hydropiper.	.	.	.	3 iii.
	Tinct. Cinchonæ Comp.	.	.	.	3 ii.
	Spts. Lavend. Comp.	.	.	.	3 iii.

Misce.

A dessertspoonful in water four times each day.

This combination, through the water pepper it contains, exerts a stimulating effect on the genital organs. If the number of emissions are increased by its use the drug may be omitted.

Or the following combination may be used for the same purpose if the capsicum, as it sometimes does, disagrees with the stomach :

R.	Bismuth. Subnitritatis	.	.	.	3 ii.
	Pulv. Zingiberis	.	.	.	3 ss.
	Tinct. Hydropiper.	.	.	.	3 i.
	Spts. Lavend Comp.	.	.	.	3 iii.

M.

One teaspoonful four or five times each day.

Two drops of nux vomica may be given in a wineglass of water before each meal, and the above preparation may be given after each meal.

In cases where the patients are subject to bilious attacks the bowels should be thoroughly cleansed with the following simple combination of cream of tartar and Epsom salts and afterwards nux vom. may be administered in two or three drop doses in water before meals, and nitro-muriatic acid in five drop doses after each meal.

B.	Magnesiæ Sulph.	.	.	.	.	.	.	.
	Potassii Bitartras.	.	.	.	.	.	aa	3 i.
	Aquæ .	.	.	.	.	.	.	Oi.

M.

One or two wineglassfuls before breakfast.

If the patient has been in the habit of drinking he may be given a wineglassful every hour till four or five doses have been taken, and afterward take the medicine before breakfast in the small dose.

The passages produced by this medicine are unattended with pain, and great relief is usually experienced in all cases where the medicine is indicated.

In some patients insomnia is a prominent as well as a most obstinate symptom. These cases in addition to their baths (see p. 227) need sedatives that will not disorder the stomach or retard the assimilation of food in any way. The following I have found beneficial :

B.	Tinct. Lupuline .	.	.	.	.	.	.	.
	Tinct. Hyoscyami	.	.	.	.	.	aa	3 i.
	Tinct. Valerianæ	.	.	.	.	.	.	.
	Tinct. Gentianæ .	.	.	.	.	.	.	.
	Spts. Vini Rectif.	.	.	.	.	.	aa	3 ii.

One dessertspoonful in a wineglass of water three or four times each day. A double dose may be taken at bedtime. The action of this medicine may be accelerated by placing

over the stomach and præcordium a muslin handkerchief wet with tinct. of capsicum diluted with alcohol sufficiently to prevent pain. I have found it useful in many cases. I have also used in addition to tonics in cases of insomnia parvules of morphia and atropia at bedtime (morphia  $\frac{1}{20}$ , atropia  $\frac{1}{100}$ ), with good results, but I do not advise their continuous use. They should be employed only in cases of emergency, when it is absolutely necessary for the patient to get a good night's sleep.

When there is weakness of the heart and a tendency to syncope, as there often is, especially in females, the following may be used :

R.	Tinct. Digitalis	.	.	.	.	.	3	iii.
	Tinct. Ergotæ	.	.	.	.	.	3	i.
	Spts. Ammoniæ Aromat.	.	.	.	.	.	3	ss.
	Tinct. Valerian	.	.	.	.	.	3	iii.

M.

One teaspoonful every two or three hours.

Or as a temporary stimulant :

R.	Spts. Ammoniæ Aromat.	.	.	.	.	.	3	ss.
	Spts. Vini Gallici	.	.	.	.	.	3	ii.

M.

Half teaspoonful in a wineglass of water every half hour or hour until the faintness has passed away. Not more than six consecutive doses should be given.

Some patients prefer medicine in the solid state. The following is an excellent combination :

R.	Ferri Arseniatis	.	.	.	.	.		
	Ext. Nucis Vomicæ	.	.	.	.	.	aa	grs. v.
	Ergotinæ	.	.	:	.	.		
	Quiniæ Sulphas.	.	.	.	.	.	aa	3 ss.

M. Ft. pil. No xxx. div.

One pill four times each day.

The ergotine and nux stimulate the circulation of blood in the genital organs. The former is supposed to reduce the calibre of the bloodvessels, thus diminishing the congestion which exists in these parts.

When constipation is a prominent symptom the combination of aloes and nux in the tonic preparation will exert a beneficial effect.

R.	Ferri. Sulph. Exsiccata	.	.	.	.	3 ss.
	Ext. Nucis Vomicæ	.	.	.	.	grs. v.
	Pulv. Aloes Soc.	.	.	.	.	grs. xv.
	Ext. Gentianæ	.	.	.	.	grs. xx.

M. Ft. pil. No. xxx. div.

One pill three times each day.

Sometimes palpitation of the heart and vertigo are troublesome symptoms. When such is the case the following preparation may be employed with benefit :

R.	Ex. Digitalis	.	.	.	.	.
	Ex. Belladonnæ	.	.	.	.	aa grs.
	Quiniæ Sulph.	.	.	.	.	.
	Ferri Phosphas.	.	.	.	.	aa 3 ss.

M. Ft. pil. No. xxx. div.

One pill four times each day.

As soon as the palpitation and vertigo are relieved this preparation should be discontinued and one of the other tonics prescribed.

Physostigma is a useful addition to the tonic or other medicines. I have employed it successfully in combination with belladonna as a laxative in torpid conditions of the intestinal canal dependent upon sexual excess and masturbation. It is also useful in any other condition where it is essential to secure a natural

movement of the bowels, without depleting the patient. Bartholow recommends a combination of physostigma, belladonna and nux vomica in the following formulæ :

B. Tinct. Physostigmatis . . . . .  
Tinct. Nucis Vomicæ . . . . .  
Tinct. Belladonnæ . . . . .  $\ddot{\text{a}}\ddot{\text{a}} 3$  ii.

M. Sig. Twenty drops in water morning and evening.

I have had better results from the solid combination than the liquid.

B. Ext. Physostigmatis . . . . .  
Ext. Belladonæ . . . . .  
Ext. Nucis Vomicæ . . . . .  $\ddot{\text{a}}\ddot{\text{a}} \text{ grs. v.}$

M. Ft. pil. No. x. div. One pill at bedtime.

Aloin may sometimes be added to the above with benefit.

#### APHRODISIACS.

When tonic medicines have been employed for two or three weeks, aphrodisiacs may be given to increase the frequency and permanency of the erections. While the genital organs are irritable, relaxed, and the emissions frequent, they should not be employed. But when all irritability has been removed by the local and general treatment, and the patient about to exercise his genital functions, their use will be beneficial.

Aphrodisiacs are of little use in patients of the third class, or those whose genital organs are in a state of constant excitement, whether that excitement is, or is not connected with partial or complete impotence. They increase the congestion and cause a vast amount of trouble.

When the impotence depends on mental emotion they can be administered at the commencement of the treatment. In no other instance can this be done. Even in these cases electricity

should be first used. Applications of electricity, hereafter to be described, rarely fail to cure the impotence. There is no absolute necessity to use aphrodisiacs in mental impotence at the onset. But I have found that if some positive excitement is produced at the beginning of the treatment by medicinal agents that recovery took place rapidly. For these patients usually lose all hope at the first failure, and are only relieved of these depressions when there is a perceptible improvement in their virile power.

All aphrodisiacs cause a determination of blood to the genital organs. Some do this by acting as a local irritant—others by stimulating the cerebro-spinal center. They all exert an injurious influence on the stomach when continued for any great length of time ; when they disturb the digestive functions ; or cause trouble in any other way they should be discontinued.

Phosphorus is one of the best aphrodisiacs in the list. It is a powerful stimulant to the genital organs. It increases the desire for sexual intercourse without producing any local irritation in the genital apparatus. It also diminishes the anæmic condition of the brain and furnishes it with material that has been lost through excess. Bartholow says, "We have no remedy at present more effective in the treatment of impotence than phosphorus." The great objection to its use is its unvarying tendency to disorder the stomach. In consequence of this it must be given in very minute doses, and its effects carefully watched. It should not be administered on an empty stomach. The drug may be given in solution or in pill form. Half a grain of phosphorus may be dissolved in an ounce of cod-liver oil, and half a teaspoonful of the mixture administered after meals until there is a manifest increase in the frequency

and power of the erections. It may be given combined with *nux vomica* as in the compound phosphorus pills. Each pill contains  $\frac{1}{4}$  of a grain of *nux* and  $1\frac{1}{10}$  of phosphorus. One pill may be given twice each day, until the desired result is attained. As soon as symptoms of disordered digestion appear, the administration should be discontinued for a few days and then resumed. If the medicine still disorders the stomach, it may be stopped permanently and another aphrodisiac substituted.

*Cantharides* is second only to phosphorus as a stimulant to the genital organs. It produces an increased flow of blood to the whole genito-urinary tract without exaggerating the desire for sexual pleasures. In over doses it causes priapism, strangury and inflammation of the genitals. Its effects, therefore, should be carefully watched.

The tincture may be given in ten drop doses four or five times daily until it produces its specific physiological effects. Better results are obtained, however, by combining it with other drugs such as ergot, *nux vomica*, *cannabis indica*, or *capsicum*.

The root of *petroselinum sativum* is possessed of qualities which entitle it to rank as an excellent aphrodisiac as well as emenagogue. The active principle apiol may be given in five or fifteen grain doses, two or three times each day. It is especially indicated if there is any malarial complication. Water pepper or *polygonum hydropiperoides* is also a useful and at the same time harmless aphrodisiac. In mild doses it stimulates the circulation, promotes digestion and increases the menstrual flow, and promotes erection. Eberle believed it to be a specific in amenorrhœa. Bartholow says, "it is a remedy of considerable power in functional impotence. When the erections are feeble,

the seminal fluid watery, and the testes soft, great results will be obtained from this remedy, provided no structural alterations hinder or prevent improvement. When hydropepper is administered in these disorders of the sexual system, it causes a feeling of weight and tension, and dragging of the pelvic viscera. As it tends to increase the blood supply to these organs, it is inadmissible when a state of congestion or inflammation exists."

The leaves of ruta graveolans also increase the flow of blood to the genital organs. Hence, it is useful as an aphrodisiac though most frequently employed as an emenagogue. The oil is principally used in doses of from one drop to five after meals.

Stillingia, sanguinaria and other remedies are used much for the same purpose. The following combination can always be relied on to do excellent work :

R.	Tinct. Hydropiper.	.	.	.	.	.	ʒ iss.
	Tinct. Nucis Vomicæ	.	.	.	.	.	ʒ ii.
	Tinct. Ergotæ	.	.	.	.	.	
	Tinct. Rutæ	.	.	.	.	.	aa ʒ ss.
	Spts. Vini Gallici.	.	.	.	.	.	
	Spts. Lavend. Comp.	.	.	.	.	.	aa ʒ ii.

M. One teaspoonful in water four or five times each day, or the following :—

R.	Tinct. Cantharidis.	.	.	.	.	.	
	Ext. Ergotæ,	.	.	.	.	.	fl aa ʒ i.
	Tinct. Nucis Vomicæ	.	.	.	.	.	
	Tinct. Capsici	.	.	.	.	.	aa ʒ ii.

Mix.

Dose, half teaspoonful in a wineglass of water four times each day. To be discontinued on the manifestation of any unpleasant symptoms.

Bartholow recommends a preparation containing :—

R. Tinc. Sanguinariæ, . . . . . 3 iii.  
Ext. Stillingiæ, . . . . . 3 v.

M. Fifteen to twenty drops in water three times a day.

If solid preparations are preferred, the following combination will be found exceedingly useful :—

R. Ext. Cannabis Indicæ . . . . . grs. x.  
Ext. Ergotæ . . . . . 3 i.  
Ext. Nucis Vomicæ . . . . . grs. iv.  
Pulv. Capsici . . . . . grs. xv.

M. Ft. Pil. No. xxx, div.

One pill four times each day.

Damiana is the latest aphrodisiac medicine. It has been largely advertised, and is said to have an excellent effect in promoting erections. Not having used it I can express no opinion concerning its medicinal or physiological effects.

In many cases of impotence it will be found necessary to continue the ordinary tonic medicine during the day and give an aphrodisiac at bed time. A simple and at the same time a valuable mixture, is the following :

R. Pulv. Capsici . . . . . grs. x.  
Quiniæ Sulph. . . . . grs. v.  
Spts. Vini Gallici . . . . . 3 ss.  
Aquæ. . . . . 3 ii.

M.

To be taken in two doses, one hour apart.

The administration of stimulants at bed time, uncombined with drugs, are often necessary for patients whose impotence results from fear. Brandy or champagne are about the best stimulants for the purpose.

In this connection it will be well for the benefit of those who

are curious on the subject to mention the peculiar remedies advised by the homœopaths. Gillman says: "Aconite is indicated by great nervous derangement; sudden starting at the least noise, fitful mood, apprehensions for the future, dizziness, frontal headache, dryness of the tongue, distress in the pit of the stomach, smarting of the egesta, wakefulness at night, drowsiness in the day time, nightmare, copious emissions. This agent will be found of no use in this disease unless it is administered in the form of tincture in a tumbler of water, a tea-spoonful every three or four hours until a decided improvement sets in.

"*Nux vomica* may be given, one dose of the 6th att. every other night, if the patient complains of costiveness, bad taste in the mouth, soreness of the stomach, constipation.

"*Mercurius vivus* is adapted to the following symptoms: pappy mouth, thinly coated tongue, altered taste, sallow complexion, chilliness, great sensitiveness to air, costiveness. The alvine evacuations being composed of hard balls or lumps having a dark color. Give a powder of the third trituration every night.

"*Carbo veget.* will be found adapted to constipation, with heartburn, acidity of the stomach, distress after eating, distension of the bowels. If the agent should not relieve the patient, phosphorus may be substituted, especially if the nervous system is very much shattered and the patient complains of oppression on the chest, tendency to cough, pains in the chest. This medicine should be used alternately with *China* if the patient is very weak.

"*Acidum muriaticum* in complete impotence, relaxation of the penis, complete absence of all erections and a sense of weakness in the parts,

“*Agnus castus*, for frequent emissions, aversion or indifference to sexual intercourse, deficient erections.

“*Argentum nitricum* : Deficient sexual desire, shriveling of the genital organs.

“*Camphora* : Weakness of the parts, want of sexual desire and erections, coldness of the parts.

“*Cannabis* : Aversion to sexual intercourse, with coldness of the genital organs.

“*Colocynthis* : Complete impotence, complete loss of sexual desire.

“*Conium maculatum* : Impotence, deficient erections, imperfect or short lasting erections.

“*Ignatia amara* : Impotence with a feeling of weakness in the hips.

“*Lycopodium* : Aversion to intercourse of several years standing, with impotence.

“*Magnesia carb.* : Deficient erections, loss of sexual desire, aversion to intercourse, no erection even when dallying with a female.

“*Selenium* : Impotence with desire for coitus.

“*Sulphur* : Impotence with amorous fancies.

“*Stramonium* : Complete impotence.

“*Sabadilla* : Relaxed penis with amorous fancies, insensitivity to sexual excitement, aversion to dallying with females, diminished sexual desire.

“*Thuja* : Indifference to female society.”

It is interesting to remark that Dr. Gillman assists the action of these remedies by the persistent use of electricity.

## CHAPTER XV.

### LOCAL TREATMENT OF SPERMATORRHœA AND IMPOTENCE.

Electricity the principal remedial agent in impotence—Effects of the induced or Faradic current—The continuous current—Electro magnetic batteries—Cases illustrating the effects of electricity—Various methods of using the electrodes—Position of the patient—Urethral and rectal electrodes—Wire-brush cauterization as a means of cure—Solid and liquid caustics—Lallemand's porte caustique—Precautionary measures to be adopted—Usual results of the operation—Caustic solutions safer—Instruments for introducing caustic solutions to the prostatic portion of the urethra—Acupuncture—Introduction of the needles—Regions in which the needles are inserted—Results of acupuncture—Use of astringent and anodyne applications—Medicated bougies—Spermatorrhœa rings—Electric rings—Rectal pessaries.

Hippocrates treated cases of spermatorrhœa and impotence, by first giving an emetic, and then confining the patient to milk and decoctions of barley and leaves. Since his time the majority of practitioners have depended mainly on local treatment to promote a cure. Many cases, indeed, can be cured by local remedies alone. The list of mechanical appliances and medicinal agents employed in or upon various portions of the generative apparatus is a long one. The majority of them I have never used, nor do I intend to use them, while there are other and better means of accomplishing the desired end. But, as they are recommended by many in the profession, whose experience is worthy of consideration, they are given in the following list in their order of value, and as recommended by others :

Electricity,  
Cauterization,  
Astringent and anodyne applications,

- Introduction of medicated bougies,
- “ Steel sounds,
- Acupuncture,
- Application of electric rings,
- “ Spermatorrhœa rings,
- “ Rectal pessaries.

#### ELECTRICITY.

Electricity is the most useful of these remedial agents. There is no other agent which is capable of exerting such a beneficial influence on *all* cases of spermatorrhœa and impotence. In fact, it should supersede, as it has in my hands, all other forms of local treatment. I have used it invariably in every case which has come under my care during the past ten years, and have rarely found it to fail in accomplishing all that is claimed for it. Electricity, when judiciously employed, removes in a short time the irritability of the mucous membrane in the prostatic urethra and seminal ducts, upon which the frequent nocturnal and diurnal pollutions generally depend. It restores the bloodvessels to their normal calibre, and stimulates the circulation through them, thus removing the congestion which always obtains in the relaxed tissues of the masturbator. It increases the nervous force, and gives tone to the muscular fibres connected with the genital organs.

Either the induced or continuous current may be employed. Having found the induced or Faradic current to answer every purpose, I do not employ the continuous, though in many hands the latter has done excellent service. The induced current is recognized by most authorities as more beneficial than the continuous in cases of spermatorrhœa and impotence.

Meyer's general conclusions as to the cases in which induced electricity is indicated, point at once to its applicability in the diseases under consideration. He says:—"The induced current is applicable in those cases in which we want—

"*a*—To excite the muscles, the nerves of sense, the sensory or the motor nerves."

"*b*—To produce contractions of the blood or lymphatic vessels."

"*c*—Or to affect organs supplied from the sympathetic."

There are many varieties of batteries in the market. Among the best are those manufactured by Kidder, Fleming, of Philadelphia, and the Galvano-Faradic Co.

The applications of electricity are best made when the patient is in a recumbent posture, though they can readily be given while the patient is sitting or standing. When the battery is ready for use and the patient's hips, back and genitals exposed, the *urethral electrode* insulated to within an inch of its point is attached to the negative pole of the battery. The other electrode with a moistened sponge on its extremity is attached to the positive pole. The urethral electrode well oiled and warmed is slowly introduced through the urethral canal to the neck of the bladder, while the sponge covered electrode is placed over the genito-spinal center at the junction of the dorsal with the lumbar vertebrae, and moved up and down over the vertebral column as far as the tip of the coccyx. While the sponge is being moved over these parts the urethral electrode is slowly withdrawn until its point reaches the bulbous portion of the urethra. There it is allowed to remain until the termination of the *séance*. When the sponge covered electrode has been applied posteriorly about five minutes, it can be carried around to the perineum, and moved slowly up

and down from the line of the scrotum to the anus until the sitting is ended.

The first *seance* should not exceed seven or eight minutes, and the current should be very mild. If the application is protracted, and the current intense enough to produce pain, too great a sedative action may be produced which may have to be counteracted by stimulating medicines. Besides this the urethral electrode, by mechanical irritation alone, may cause local inflammation if it remains too great a length of time in the canal.

At the second *seance* the day following a wire brush may be substituted for the urethral electrode. This is passed slowly over the inner side of the thighs, perineum and scrotum at the same time that the sponge covered electrode is passed over the lumbar, sacral and ischio-rectal regions. The second *seance* should last for ten minutes. On the third day the urethral electrode may be employed again. And this alternation of the latter with the wire brush may be continued until the close of treatment. If the urethral canal of the patient is not too sensitive, the urethral electrode may be employed every day, alternating at the same sitting with the wire brush.

When there are large quantities of prostatic fluid poured out or squeezed out during defecation or where there is enlargement of the gland, it will be well to use the rectal electrode. This instrument when warmed and oiled is introduced into the rectum, slowly and gently until it reaches the posterior border of the prostatic gland, when the current is passed through from the urethra to the rectum.

When the nocturnal emissions are reduced to one a week, and the erections are still feeble and infrequent a greater stimulating effect on the erectile tissues may be effected by

changing the direction of the current ten or fifteen times during the *séance*. This method usually increases the frequency and permanency of the erections.

If the impotence is complete, this method should be employed from the commencement of the treatment.

In this connection one or two instances of the peculiar effects of electricity in spermatorrhœa and impotence will be of interest.

Four years since a teacher in one of the public schools applied to me for relief. He was twenty-two years old, of good habits and capable of performing his business duties with satisfaction. He commenced masturbating when a boy of nine and continued the habit until the age of nineteen. Thereafter seminal emissions occurred with varying frequency. Some months they occurred as often as five times a week. He had essayed sexual congress on different occasions with bad results. At the time he came under my care he had from three to five emissions in the week. He was running down rapidly and in great distress of mind concerning his condition. He intended taking a vacation in the country the day after his visit. I gave him but *one* application of electricity in the manner previously described, and prescribed a tonic medicine, containing strychnia, iron, quinine and glycerine. Four weeks subsequently he returned from his vacation and, much to my surprise, informed me that only one seminal loss had taken place during the interval, and that occurred the morning of his return to town. As his former trips to the country had made no special difference in his condition, I was compelled to ascribe the principal part of healthy change to the application of electricity made on his first visit. This, of course, is an exceptional case. The majority of patients feel the effects of electricity in dimin-

ishing the number of emissions very gradually, yet the results in this instance indicate the curative power which electricity possesses in spermatorrhœa and impotence.

An average result of the electrical treatment is illustrated by the following case :—

J. S., æt 29, occupation book-keeper, came under treatment in March 1877. He had indulged in onanistic exercises during his school-boy days. At the age of eighteen he cohabited with a servant at varying intervals for a period of two years. Subsequently circumstances compelled him to refrain from any indulgence for six years, during which time he had emissions two and three times each week. He was then (March '77) contemplating matrimony, but his state of health was such that he feared he would be unable to fulfill his engagement, or perform his matrimonial duties with satisfaction. His memory was not so good as in former years, and his ability to endure mental and physical labor comparatively small.

He received applications of electricity every other day for two months ; took cold water sponge baths and tonics during the same period. At the end of the first month an interval of ten days had elapsed between the last emission and the present one, and his virile power was increased, as evidenced by the character of the erections. He was discharged at the end of the period mentioned and entered the marriage state, feeling well and competent to perform all his functions properly. He has been married eight months and has suffered no inconvenience from his previous disorder in any particular ; he considers himself perfectly well.

In all cases where the nocturnal emissions have been reduced to one in a week or ten days, and the erections occur nightly, the patient is in a fit condition to marry. Marriage

should take place as soon as the patient leaves the hands of the physician, in order that the healthy condition commenced by the treatment may continue without interruption. Wedlock in itself and independently of everything else, is a means of cure which should never be lost sight of. The patient even when diffident and fearful, may rest assured that at the end of a few weeks at the most his virile power developing strength from a natural source will supply all normal demands made upon it.

#### CAUTERIZATION.

This operation may be performed with either solid or liquid caustic preparations. Applications of solid caustics are usually made with Lallemand's *porte caustiques*. I do not advocate cauterization of the prostatic urethra when electricity is available, but there is no doubt it is the next best thing, and is productive of excellent results. The method of employing Lallemand's instrument may best be described in his own words :

" Before proceeding to cauterization it is indispensably necessary to introduce a catheter for the double purpose of taking the exact length of the urethra and of completely emptying the bladder. On slowly withdrawing the instrument during the escape of the urine, the stream is arrested as soon as the eye of the catheter enters the canal, and recommences again when it is again pushed into the bladder. The penis being then moderately stretched the thumb and forefinger should be applied to the instrument at the point of the glass, when the catheter is withdrawn. The distance between the finger and thumb and its eyes give the exact length of the urethra, and this must be immediately marked on the *porte caustique*, the eyes of the olivary instrument and the position

of the fingers indicated by fixing a little slide on the stem of the instrument. When the porte caustique has penetrated so far into the urethra that this slide touches the front of the glans, the penis being exactly in the same state of elongation in which it was when the catheter was introduced, it is clear that its extremity will be in precisely the spot previously occupied by the eyes of the catheter when the length of the canal was taken, that is to say at the commencement of the neck of the bladder, a position which it is highly important to the operator to be assured of.

"The bladder must be completely emptied in order that no urine may penetrate into the tube of the porte caustique, and that none may enter the urethra during cauterization. When the caustic is wetted by the urine it acts much less energetically than if it were dry, and its action extends to parts where it is not required.

"As the olivary extremity of the porte caustique approaches the neck of the bladder the irritability of the passages increase and the patient's agitation often becomes so great as to inconvenience the operator. The instrument should now be allowed to pass on by its own gravity, attention being paid to detect the moment when the olivary extremity passes the neck of the bladder. As soon as this happens the instrument should be gently withdrawn, so as to bring its olivary extremity slightly within the neck of the bladder, and firmly held while the outer tube is a little drawn back and the *curette* very rapidly passed over the inferior surface of the prostate by slightly turning the stem attached to it. The instrument then should be entirely closed and slowly withdrawn from the urethra."

Lallemand claims a large number of cures by this process. It is readily seen that if the operation is properly performed, the

granulations which exist in the prostatic urethra will be destroyed and the irritability lessened. This being the case, a diminution in the number of the seminal emissions must necessarily result. The great objection to the operation, however, is that great pain is produced by it, and severe inflammation of the urethra and bladder is liable to follow it. In the only case it was employed by me considerable bleeding followed the withdrawal of the caustic.\*

#### ACUPUNCTURE

Is one of the most ancient operations for the cure of spermatorrhœa and impotence ; Lallemand and other surgeons of his time employed it successfully.

Needles from two to three inches in length are passed through the perineum into the prostate gland and neck of the bladder. Before the operation is performed the patient's bowels should be emptied and the urine drawn off. The first needle is introduced in the median line midway between the anus and scrotum. The second is inserted into the prostate half an inch below the first, and the third needle is introduced half an inch above the first one. They are kept in position half or three quarters of an hour. In no instance should they be allowed to remain over an hour. If much pain is caused by the operation an opiate may be administered.

Some surgeons recommend the introduction of needles into the testicles and spermatic cord for the same purpose. The operation is a barbarous one and should not be attempted.

With regard to the effects of acupuncture, Lallemand says : "The patients experience, immediately after removal of the

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\* Since the above was written I have employed the porte caustique in three other cases without producing much bleeding.

needles, a sense of comfort and suppleness which extends from the perineum to neighboring parts, and remarkable improvement in all the phenomena caused by disordered innervation of the genital organs usually results. Sometimes, indeed, such disorders do not re-appear.

#### COUNTER-IRRITATION.

Counter-irritation, to cause a determination of blood to the surface, is often used to relieve the irritability of the genitals which occasions the emissions, and also to prevent the confirmed masturbator from handling the parts. Counter-irritants are seldom if ever necessary except for the latter purpose. Any diminution in the congestion produced by them is merely temporary. In case it is found necessary to employ them cantharadal collodion or a fly blister may be used. Painting the parts with tincture of iodine will answer where mild measures are necessary. Croton oil is a dangerous counter-irritant and should never be applied to the genitals, as it is apt to produce a severe degree of inflammation and sloughing.

Astringent and anodyne injections have long been used in the treatment of spermatorrhœa and impotence. At best they are only palliative. They merely diminish for a time such unpleasant accompaniments of the disease, as prostatorrhœa, cowperitis, and allay the irritability existing at the orifice of the seminal and prostatic ducts.

Syringes, with nozzles six or seven inches in length, and having several perforations at their extremities, injection catheters, etc., are employed for these deep urethral injections. Dr. Bumstead's syringes are the best for the purpose. The injection may be made with an ordinary urethral syringe if the

others cannot be had, by pressing the fluid in the urethra backwards with the finger after the syringe is withdrawn. When it has reached the neck of the bladder, by relaxing the sphincter as at the commencement of micturition the liquid can be pressed into the bladder.

One of the simpler astringent remedies is the following :

R. Acidi Gallici	•	•	•	•	•	•	3	iii.
Glycerinæ	•	•	•	•	•	•	3	i.
Aquæ	•	•	•	•	•	•	3	iv.

Misce.

One syringeful of this solution may be injected at bed time.

In some cases alum is useful in the proportion of one drachm to four ounces of distilled water. One injection each night. If there is much smarting at the neck of the bladder it must be discontinued.

When a sedative as well as an astringent effect is required the following combination will be found of benefit :

R. Ext. Hyoscyami	•	•	•	•	•	•	3	ii.
Vini opii	•	•	•	•	•	•	3	i.
Acidi Gallici	•	•	•	•	•	•	3	i.
Glycerinæ	•	•	•	•	•	•	3	iv.

Misce.

One tablespoonful of this mixture added to an equal quantity of water may be injected twice each day for one week, unless pain at the neck of the bladder is excited by its use. In such a case the number of injections may be limited to one each night or every other night. If the injections are employed twice a day for one week, thereafter they should be used every other day.

Injections containing ergot are often used, such as :

B.	Ext. Ergotæ fl.	.	.	.	.	.	3 i.
	Ext. Uva Ursi fl.	.	.	.	.	.	3 ii.
	Aquæ	.	.	.	.	.	3 ii.

## Misce.

One teaspoonful in a wineglassful of water; inject once each day.

A number of unguents are used for medicated bougies. The ordinary ung. gallæ combined with ung. opii is a useful one. The ointment is smeared thoroughly over the extremity of the bougie or sound. The instrument is then passed down to the neck of the bladder and allowed to remain there for ten minutes.

The following combination is as good as any that can be used :

B.	Ext. Belladonnæ	.	.	.	.	.	
	Ext. Hyoscyam.	.	.	.	.	.	āā grs. v.
	Pulv. Opii	.	.	.	.	.	grs. ii.
	Acidi Gallici	.	.	.	.	.	grs. x.
	Cerat. Simpl.	.	.	.	.	.	3 ii.

## M.

A thick layer of the ointment is placed on the bougie for about two inches from its extremity. When introduced to the neck of the bladder it may be allowed to remain for five minutes. This preparation may be introduced daily.

## INTRODUCTION OF SOUNDS.

The daily introduction of steel sounds has been advocated by many surgeons. They claim that the presence of the sound in the prostatic portion of the urethra, empties the congested and dilated bloodvessels, promotes absorption of inflamma-

tory products and gradually removes the irritability of the seminal passages, thereby diminishing the number of pollutions.

My experience with sounds has taught me that but little benefit can be expected from their employment, except in neuralgia of the neck of the bladder.

#### ELECTRIC RINGS.

The electric ring is an ingenious contrivance for awakening the patient before an emission occurs. The ring is placed around the penis at night and connected with an electric belt which is placed around the abdomen, the latter being attached to the poles of a battery. When there is a determination of blood to the genital organs during sleep, the whole tissue of the penis becomes distended, the ring expands and separates the wires which prevent the patient from feeling the electric current while the organ is quiescent. As soon as the separation takes place a violent shock is experienced which awakens the sleeper in time to prevent an emission. This instrument was invented by Johnson of New York. He calls it an electric monitor.

Steel rings armed with sharp teeth on the inner surface are also employed for the same purpose. The ring is placed on the penis before going to bed ; when erection takes place the sharp points pierce the integument and the pain arouses the sleeper. Leather rings furnished with teeth or pins are also recommended for a like purpose.

In some cases when the patient cannot get intelligent advice or treatment such devices may be employed for temporary relief ; otherwise, they should never be advised.

#### RECTAL PESSARIES.

Pessaries shaped like an egg and inserted into the rectum so as to press on the ejaculatory ducts and prevent the semen

from entering the urethra have also been recommended. No benefit can arise from their employment. It would be better for the patient to put up with an emission than to have an egg pessary introduced into his rectum every night.

#### RECAPITULATION.

Patients belonging to the first class (see page 207) are extremely rare. They are nearly always beyond the reach of moral or medical treatment. The will power not being sufficient to control the habit, ordinary treatment is wasted. It may be well to exercise strict supervision over the patient, and use the baths, tonics and electricity for a few weeks, and then if there is no good result, the patient should be castrated without delay, and the penis, pubes and perineum covered with cantharadal collodion. Simple castration will not at once stop ejaculations through the urethral canal, so it is consequently necessary to place the parts in such a condition as to prevent them from being handled. If these measures fail, I see no objection to removing the whole of the external genital apparatus.

Patients of the *second class* (see page 208) are always curable. Though very much broken down, their will power is sufficient to enable them to discontinue the habit completely. Let the patient understand that he can be cured by following up systematically every order given him. He should take from three to six sitz baths daily for the first ten days or a fortnight. After that period one or two will be sufficient. If the baths cause much aching about the loins and difficulty in locomotion, they should not be used so frequently. The pain and stiffness do not often occur, but when present, contra-indicate the frequent use of the bath. Every morning after breakfast an injection of one pint of cold water should be taken. This can be con-

tinued daily, until the evacuations from the bowels are normal in character. Three or four weeks is generally long enough to accomplish this end. If the patient is not strong enough to take a sponge bath in the morning he should be bathed while in bed, and after the bath have a brisk rubbing. Instead of eating three meals per day, he should have six or seven as described (page 221). Exercise in the open air is indispensable.

The applications of electricity may be made every day or every other day in the manner described (page 255), with this difference that the current should be reversed often during the sitting, in order to get the stimulating effect of the application. Nothing tends so much to a cure as an increase in the erections. The moral effect of this upon the patient cannot be overestimated. As the increase in the virile power is not attended by more frequent emissions, there is nothing to add to the anxiety of the patient. If ordinary aphrodisiacs were used to accomplish the same purpose, an increased number of emissions would at once result. Therefore, the use of aphrodisiacs at this stage is inadmissible. The only medicines to be employed from the commencement of the treatment are those which give tone to the system (see page 241).

When the emissions are brought down to one or two in a week and the erections occur every night, it is well to advise legitimate sexual intercourse. No fear need be entertained of failure if the patient is willing to follow the advice of his physician. If necessary the patient may take a few doses of some of the aphrodisiac combinations previously mentioned, before testing his powers in sexual congress, and he may be allowed to continue them for a couple of weeks after marriage.

Bromide of potassium and all medicines of a like nature should be *strictly prohibited* to all patients of this class.

Patients of the *third class* (see page 209) make up a large majority of the subjects who present themselves for treatment. The undue excitement of the genital organs evidenced by frequent but feeble erections and frequent emissions, re-acts on the circulation and their mental excitement and fears form the principal features in the case. They require judicious advice more than they do medication. If they could be induced to marry, and wait for a week or two before becoming disheartened at temporary failures, they would need no other cure. But their fears are so urgent that a systematic course of treatment is necessary to get them in a proper frame of mind for marriage.

A sponge bath in the morning and a sitz bath at night of fifteen minutes' duration are always necessary. The cold water enema may also be employed, but some of the mild cathartics will answer as well. When the genital excitement is very great a few doses of bromide of potassium given at bed-time for the space of one week will do good. It should never be continued longer than a week. Applications of electricity may be made every day, with the negative electrode in the urethra and the positive electrode over the spine (see page 255). The current need not be reversed until the patient has been under treatment five or six weeks.

Aphrodisiacs are never necessary for patients belonging to this class unless failure should occur after marriage.

Patients of the fourth class (see page 210) should cease from all attempts at sexual intercourse for several weeks, or months, if necessary, and make a short or long trip into the country with enjoyable company. Take in all the change of air and surroundings as will keep the mind away from all sexual matters. They should exercise actively in the open air and bathe freely, according to the

directions in a previous chapter. Upon returning home they should make up their minds not to attempt sexual intercourse for three or four nights at least, and not then until they have perfect control of themselves in every way.

Female masturbators can only be cured by marriage. The general health must receive the same attention as in the case of the male masturbator. The tonics, baths and other remedial agents described are all necessary, but marriage itself is the only positive cure. If circumstances are such as to prevent the patient from entering the married state and the will power is not strong enough to prevent her indulging in the vice, then amputation of the clitoris may be considered. Indeed, I think it would be a perfectly justifiable operation in all bad cases.

It is well also to make liberal use of bromide of potassium in these cases so long as it does not materially disorder the stomach. For obvious reasons the bromides may be more freely used in cases of female onanism than in cases occurring in the other sex.

**Cold sitz-baths should be given freely.**

## CHAPTER XVI.

### TREATMENT OF SPERMATORRHœA AND IMPOTENCE.

Methods of Treatment used by Gross, Van Buren and Keyes, Post, Bartholow, Hutchinson, McGraw, Gant, Acton, Humphrey and others.

In order to make this volume complete as a book of reference, I have collected the opinions of some of our principal surgeons, and given their various methods of treatment. Their peculiar views can be compared and an intelligent opinion formed as to the respective merits of each mode of treatment.

Prof. Samuel D. Gross, of Philadelphia, in speaking of the treatment of spermatorrhœa says: "The milder cases after riddance of the exciting cause, often recover spontaneously, or under the use of very mild means, as a proper regulation of the diet and bowels, exercise in the open air, cold bathing, sleeping upon a hard mattress. Circumcision will be necessary when there is hyperæsthesia of the head of the penis from the irritation of retained sebaceous matter consequent upon elongation and contraction of the prepuce. When the parts are morbidly sensitive leeches may be applied to the perineum, and use made, twice daily, of some astringent and anodyne injection, as a solution of acetate of lead and opium, in the proportion of three grains of each to the ounce of water. But a very different mode of management will be required when the disease is fully established, especially when it is dependent upon habitual onanism. The best local treatment then, at least in many cases, is cauterization, but before resorting to this expedient, the urethra should be well explored with a bougie

or silver catheter, to ascertain the precise seat of the irritation. This will sometimes be found in front of the membranous portion of the urethra, but generally it is further back, at the neck of the bladder, or, more correctly speaking, at the orifices of the ejaculatory ducts and the anterior extremity of the gallinagenous crest, where it is often so great that the patient will shrink from the mere contact with the instrument. Occasionally the morbid sensibility is diffused over the whole surface of the urethra, from one end to the other, and then the passage of the bougie is liable to be followed by excessive pain and even syncope." [Dr. Gross then describes the process of cauterization which has been given in a previous chapter.]

"Instead of the solid nitrate of silver, a solution of the salt may often be advantageously employed, in the proportion of ten to twenty grains to the ounce of water. The fluid is conveyed directly to the prostatic portion of the urethra by means of a syringe shaped like an ordinary catheter, and perforated with numerous openings at the distal extremity. The injection should not be repeated oftener than once in six, eight, or ten days.

"Cold bathing, general and local, is often highly beneficial ; dashing cold water against the perineum, scrotum, penis, and inside of the thighs is useful. Some persons, especially such as are of a nervous, irritable temperament, experience greater advantage from warm bathing than from cold. Occasionally marked relief arises from cold enemas repeated twice in the twenty-four hours. When the patient is plethoric, as is sometimes the case in the early stage of the disease, leeches may be applied to the perineum, followed, if the local excitement is unusually great, by a blister, a small seton, or an issue. When the morbid sensibility of the urethra is very extensive, obsti-

nate or persistent, the treatment should be aided by the injection, twice a day, of a weak solution of nitrate of silver and opium in the proportions of about two grains of the former and five of the latter to the ounce of water. Sulphate of zinc, Goulard's extract and acetate of lead also answer extremely well in cases of this kind. . . . In some cases the irritability of the urethra promptly yields to the daily use of a full sized bougie retained for half an hour at a time. The morbid erections so often present in spermatorrhœa are generally easily controlled by anodyne enemas, or by opium, belladonna and tartar-emetic given by the mouth at bed time.

"The patient must sleep upon a hard mattress and everything stimulating, whether in the form of food, drink or medicine must be carefully avoided. The bowels must be kept soluble by mild aperients. Exercise in the open air is an important auxiliary. Riding on horseback is injurious, as it has a tendency to create undue excitement in the genital apparatus. Sometimes an entire change of occupation affords more relief than anything else.

"Where there is great prostration of the system, with restlessness and loss of sleep, the use of tonics, as quinine and tincture of iron with hyoscyamus or opium is indicated. Dilute phosphoric acid sometimes exerts a powerful restorative influence. In such cases a change of air, and the daily use of the shower bath, greatly promote recovery. The diet should be light, but nutritious, and a glass of German wine should be allowed at dinner. Should there be reason to believe that the emissions are dependent upon cerebellar irritation, the chief reliance must be upon leeches and blisters to the nape of the neck, cold shower baths and other soothing measures. Much has lately been written in favor of lupulin as a sedative in this

disease, but though I have frequently employed it, it has never done any good in my hands. When such a remedy is required the best article that I know of is bromide of potassium given three times a day, in doses ranging from twenty to thirty grains or under with a few drops of tincture of aconite, in half an ounce of camphor water. I have also used with excellent effect, in a number of cases, bromide of ammonium in conjunction with tincture of cypropodium. The action of these medicines is powerfully sedative, and they are worthy of much greater attention than has hitherto been accorded to them in this particular class of affections.

"When, by the above measures, the system has regained its natural tone and the sexual apparatus its accustomed vigor, the best guarantee against relapse is marriage. Upon this point, however, it is impossible to be too cautious."

Van Buren and Keyes, commenting upon the subject, say: "When a man comes complaining of the results of masturbation, an attentive study of his symptoms will not infrequently disclose his disease to be hypochondria, and his malady ungratified sexual desire with often some neuralgia of the vesical neck. His training should consist in encouragement and continence, with absolute purity of thought, and subsequently marriage, to regulate his sexual hygiene. After marriage it is rare to hear any further complaint from these cases, always provided there is really nothing more than functional derangement at the bottom of the patient's complaint, as is the case in the vast majority of instances.

"As for medicines, they are of little or no value; camphor, bromide of potassium or lupulin might be given as *placebos*, but it is doubtful if they are of any efficacy. Cold sponge baths, out-door sports, physical fatigue, sleeping in a cool room on a

hard bed with a light covering are all useful; eating lightly at night, not retiring until very sleepy and rising immediately on waking in the morning are powerful assistants in breaking up the habit, but all will be of no avail unless the *morale* of the patient be elevated, unless he keeps his thoughts pure, and desires, for the manliness of it alone, to be rid of his bad habit.

“The treatment of diurnal pollution is by steel sounds and local astringents to the prostate together with most of the means detailed for nocturnal emission. Circumcision should be performed if the glans penis is sensitive. . . .

“The use of the steel sound and electricity helps to give tone to the parts. The use of local astringents to the prostatic sinus is often of marked advantage. The best agent for effecting this is tannin, and the cupped sound, the most convenient method of applying it. . . . . The applications are to be repeated once or twice weekly, according to the effect, and often in a short time a change in the symptoms for the better is usually manifested in mild cases. Should these simple means fail recourse may be had to prostatic injections with deep-urethral syringes; a solution of nitrate of silver not stronger than five or ten grains to the ounce being used. Failing with this, hope must be based upon the continuance of general and local tonic hygienic measures. The use of the fluid nitrate of silver with Lallemand’s instrument is not justifiable, for fear of including the orifices of the ejaculatory ducts in an eschar and obliterating them by cicatrization.”

Professor Roberts Bartholow recommends cauterization with solid or liquid caustics, injection of astringents for relief of the local symptoms. In discussing general medication under the head of “Anaphrodisiacs” he says. “One of the oldest of

these remedies is camphor. . . . It is not, however, a very valuable remedy. To produce the desired anaphrodisiac effects large doses are necessary; it frequently fails, and its action upon the stomach is unpleasant, giving rise to a sense of heat and burning, and followed by disagreeable eructations.

“Lupulin has considerable efficacy as an anaphrodisiac, but like camphor it is uncertain. Conium and belladonna are quite as efficient if given in sufficient doses, and are considerably more certain. Conium, particularly, is not given in doses sufficient to produce its peculiar effects upon the genital organs, as ordinarily prescribed. Five to fifteen grains of the extract, according to its freshness and activity, may be administered at a single dose. . . . . . . Conium and belladonna are, however, chiefly valuable when administered with bromide of potassium or other true anaphrodisiacs.

“The most important agent of this class, the most efficient and certain, and the least distressing in its immediate and remote effects, when purely administered, is the bromide of potassium. The anaphrodisiac property of this drug is now almost universally acknowledged, but the condition of its success and failure have not been as definitely determined as is desirable. There are yet some skeptics who disbelieve in this property of the bromide of potassium.

“*Aphrodisiacs.*—These are indicated under certain circumstances. The tincture of cantharides is sometimes beneficial in cases of great atony and relaxation. Those characterized by profuse mucous discharge, so-called diurnal pollutions, very feeble power of erection, and absence of sexual desire. It is contra-indicated when much hyperæsthesia of the prostatic portion of the urethra exists. To prevent its irritant effects, or at least to reduce them to the minimum, opium, or cannabis indica,

or chlorodyne, may be advantageously combined with it. The red or amorphous phosphorus may be given in the same class of cases as suggested for the tincture of cantharides. *Nux vomica* is adapted to those cases in which it is desired to restore the functional activity of the sexual organs after the state of quiescence induced by the prolonged administration of aphrodisiacs. *Cimicifuga (actea racemosa)* has seemed to me to possess considerable aphrodisiac power, and has proved useful in cases of long standing spermatorrhœa, accompanied by nervousness and anxiety, and diminished sexual desire.

“Galvanism, especially the direct current, and static electricity, are often decidedly aphrodisiac, and are probably applicable to more numerous cases than any other remedy of the class. The moral effect of galvanism is too important to be disregarded.

“Ergot has been much extolled in those cases in which emission takes place quickly with feeble erections.

“Iron, quinine, the vegetable bitters, the mineral acids, are indicated in anæmic cases. The *hygienica*, exercise, bathing, travel, etc., are valuable adjuncts to the remedial measures.”

In his work on therapeutics, Dr. Bartholow also advocates the injection of a solution of ergotin near the dorsal vein of the penis, in order to compress it and promote erections.

Prof. Frank H. Hamilton says:—“If the emissions are only occasional, and do not affect the general health, no treatment is required and these constitute a majority of those cases which are brought under the notice of the surgeon. If on the other hand, both the general health and the mental functions are sensibly impaired as is sometimes the case, a careful inquiry must first be made to ascertain the cause and the proper measures must be adopted for its removal. In nearly all of these latter examples there is evidence of a loss of tone in the

entire nervous system and it will be proper to recommend plain but nutritious diet, mineral tonics, cold bathing with frictions, and out-door exercise. All stimulating liquors and tobacco are hurtful. The emissions take place usually at night or towards morning, when the patient has become warm in bed, and is sleeping soundly. In such cases the patient must be enjoined not to eat a hearty meal within four or five hours of retiring ; he must empty his bladder before getting into bed ; the bed should be rather hard and the coverings light, so that his sleep shall be less profound ; he must lie upon his side, never upon his back and if possible he should rise a little past midnight, or when he has been in bed about four hours, and, stepping upon the cold floor, empty his bladder again. A strict adherence to these rules seldom fails to prevent nocturnal emissions, and if the habit can be interrupted by these or any other measures for several weeks, the patient is on a fair way for recovery. The object in requiring the patient not to rest upon his back and to empty the bladder often is to prevent an accumulation of urine upon the trigone and neck of the bladder where its presence is liable in children to cause involuntary discharges of urine and in those who are older involuntary discharges of semen.

"As a direct means of recovery from the morbid irritability of the neck of the bladder no plan is more successful than the application of nitrate of silver first suggested and practiced by Lallemand, but the instrument invented by Lallemand and employed by most surgeons up to a very recent date, has proved very unsuccessful and ought to be wholly laid aside. In addition to the numerous accidents which have attended its use, and which have from time to time been recorded by surgeons, it has happened under my own observation also, that a young

physician who had borrowed my instrument, turned the style in the wrong direction, and broke it, leaving the cut, containing the caustic and several inches of the cord in the urethra, from which it was with great difficulty removed by a narrow urethral forceps. Since then I have ceased to use Lallemand's instrument myself, and have never recommended its use to others, but I have employed instead a method similar to that which I have seen more recently recommended by Mr. Erichsen. A silver catheter furnished with a large number of small holes instead of the usual long fenestra at its vesical extremity, is introduced to the neck of the bladder, when a piece of sponge fastened to the end of the wire stylet, and saturated with a solution of nitrate of silver, is carried forcibly to the vesical extremity of the catheter driving the caustic solution out upon the mucous membranes. In the first experiment the strength of the solution is not to exceed five grains to the ounce. If this fails after the lapse of two or three weeks ten or twenty grains to the ounce may be employed. Latterly I have obtained in a few cases benefit from the daily introduction of a steel sound of moderate size.

“Beyond these measures, all of which it must be acknowledged are liable to fail, nothing but wedlock can hold out much promise of a cure, and this has proved successful in my observation almost without an exception, not always immediately, but the improvement is generally manifest within a few weeks or months, and a complete cure can in most cases be assured after a year or two at most; nor, in general, need any fear be entertained that the results on the patient will be found to have been injurious. Beyond a temporary incapacity resulting from a lack of confidence, no failure of the virile powers is generally experienced.

"I have omitted to speak of ligature of the spermatic arteries, ligature of the vas deferens and castration, all of which methods have occasionally been practiced in extreme cases of onanism or entire mania. When practiced for the cure of onanism these measures have in most cases been successful, but the relief has not generally been immediate."

Prof. Alfred C. Post sends me the following brief summary of his method in the treatment of spermatorrhœa and impotence : "I have regard to the constitutional condition of the patient and to the local irritation or congestion of the parts specially involved in the disease. As to the general condition of the patient, I combat debility as indicated by feeble pulse, pale complexion and muscular inertia, by tonic medicines, as iron and quinine, by cold bathing, local and general, especially salt water bathing, by regular moderate exercise in the open air, by nutritious diet, cheerful recreation and other appropriate hygienic means. When the prostatic part of the urethra is in a congested and irritated condition, I make gentle pressure upon it by the careful introduction of steel sounds, of as large a size as can be introduced without giving much pain to the patient. I repeat the introduction at intervals of two or three days. If the irritability be not relieved in this way, I make an occasional application of nitrate of silver to the prostatic portion of the urethra by means of Lallemand's porte caustique or other suitable instrument. I sometimes derived benefit from the use of ergot, giving 30 minims of Squibb's fluid extract three times a day in water, and continuing its use for several weeks. It is always important to guard against constipation of the bowels. Good effects are sometimes derived from stimulating diuretics such as diosma crenata, uva ursi, copaiba, cubebs, oil of sandal wood, oil of turpentine,

Dr. Joseph C. Hutchinson, of Brooklyn, says: "In cases of spermatorrhœa requiring treatment, that is to say when the emissions occur two or three times a week and affect the general health, the cause of the trouble should be ascertained and the means for its removal adopted at once. The usual cause is self-pollution. The patient should be directed to avoid stimulants and tobacco (the latter direction is specially important), to have plenty of out-door exercise, to use mineral tonics, cold bathing, etc. He should sleep on a hard bed with light covering, avoid fluids as far as possible during the evening, empty his bladder before retiring and at any time he may awake during the night, and never sleep upon his back. This may be avoided by tying a handkerchief around the body with a knot in the center behind. These directions strictly adhered to will overcome the tendency to *excessive* nocturnal emissions in many cases. In the more obstinate cases I know of no remedy so generally useful as ergot. I advise 5 grs. of Squibb's extract, representing 20 grs. of the best ergot, three times a day. In most cases the hyperæsthesia which exists in the neighborhood of the ejaculatory ducts requires for its removal the application of alternative and astringent unguents to the affected parts. That which has been the most satisfactory to me is an ointment containing one-fourth of a grain of sulphate of copper to the ounce, applied once or twice a week by means of a number twelve cupped steel sound, to the prostatic urethra. In this way we obtain the benefits not only of the medicinal agent, but also of the sound itself, which is by no means unimportant. The cupped sound I have used for the last twenty years formerly belonged to and was used by the late Dr. Isaacs. The ointment may also be employed by means of a long pipe urethral

syringe devised by myself and made by Tiemann. I have used with advantage urethral suppositories of butter of cocoa containing one-quarter of a grain of carbolic acid pushed down to the prostatic urethra by a steel sound and allowed to dissolve there. Patients may be instructed to use these instruments themselves when it is not convenient to attend in person as often as necessary. I formerly used Lallemand's instrument for applying solid nitrate of silver to the orifice of the ejaculatory ducts, but abandoned it because of unpleasant effects which sometimes followed its use. Should these measures fail to promote a cure, the patient ought to be married. Wedlock is often successful when everything else fails.

"In cases where impotence is the principal feature of the case, I have found nothing as efficient as fifteen minims each of the tinct. ferri chlor. and tinct. cantharides with one twenty-fifth of a grain of strychnia. The iron may be omitted when not indicated. In conjunction with the above mixture, phosphorus in one-fiftieth of a grain dose may be used. Very often phosphorus alone is relied upon. The use of the cupped sound and the unguents recommended in the treatment of spermatorrhœa have a marked beneficial influence."

Prof. Theo. A. McGraw, of Detroit, says: "I do not believe that even a daily emission of semen will do serious damage to a healthy vigorous man. In view of the fact that multitudes of men after marriage have connection with their wives more than once every night without suffering injury, it seems to me an absurdity to ascribe so much evil to seminal losses as is usually done by authors. Lallemand especially confounded the effects of long dissipations and other diseases affecting the genital organs with those of seminal losses."

"2d. My experience teaches that young men who do not

suffer from involuntary emissions once or twice a month or week, are rarely to be found in civilized society. This is a physiological necessity and it seems to me just as absurd and useless to order medicines and apply treatment to cure moderate seminal losses as it would to try to prevent a man from passing water. When the seminal vessels become full they will contract and empty themselves.

“3d. Young men who read trashy pamphlets on spermatorrhœa may brood over their fancied disease until they cause serious and often irreparable damage to the nerves supplying the genital organs. This causes loss of sexual power, increased irritability of the organs, and eventually an impotence which is not always susceptible of cure. I regard this as the result of the mental despondency and perverted attention, kept up as it often is through a long series of years. I do not believe that it is ever caused by the occurrence of emissions alone.

“4th. As regards treatment, the *sine qua non* seems to me to be, to get out of the patient’s head that a seminal emission is in itself hurtful. He may then get his mind in healthier channels and get well. He will always, however, continue to have more or less frequent involuntary emissions until cured in marriage.”

Acton of London, says : “The first consideration on dealing with any case of spermatorrhœa, is to ascertain from which of its many causes the affection may have more especially arisen. Each patient may complain of some particular or well marked symptom to the exclusion of all others, though the affection itself may consist of a lesion of more than one function. It is therefore of great importance that this distinction should be clearly understood. According as one or other of the functions (e. g. erection, emission, or the character of the emitted semen) is in fault, so must the treatment vary : what may be good in one

case may not be applicable in another. Having learned what particular symptom the patient complains of, he should be desired to make water into a glass which should be deposited at once on a stand, to be examined at leisure. It is well at the same time to pass an oblong bougie in order to ascertain the susceptibility of the urethra . . . In order to cure the affection it is of more consequence to ascertain the *immediate* existing or local cause than the *primary cause* which may have impaired the function or congested the brain.

“Before attempting the curative treatment the *preventive* one should be commenced. It should be ascertained if bad habits exist, and if so, the patient should be told at once that unless they are left off it is useless for the surgeon to attempt to heal him. It should, however, not be concealed from the patient that the means about to be employed will speedily impart such power to the will, that by his own volition he will be capable of correcting habits which were previously beyond his control. Moderation in sexual indulgence, if not abstinence, should be enjoined on the married, and a promise to that effect obtained. It should be next ascertained whether constipation exists, whether ascarides excite the secretion, or if the patient suffers from varicocele. If the latter complication be present a suspensory bandage must be worn, or what is still better, a varicocele ring, which the surgeon should teach the patient how to put on . . .

“The patient must do his utmost to prevent emissions taking place, and to effect this should have recourse to all the means spoken of.” . . . [Mr. Acton employs the measures previously mentioned, page 224.] “In the slighter cases of spermatorrhœa, these remedies may alone suffice, and as stated above the occasional passage of a large bougie or the glass

tube of the instrument hereafter to be described will suffice to cure the patient. If, however, these plans do not succeed, and if the emissions occur I have no hesitation in at once employing cauterization." [Mr. Acton injects a ten grain solution of nitrate of silver with a large glass syringe.] With regard to its efficacy he says: "The advantages of injecting a solution of nitrate of silver are so manifest that I now never employ any other plan, and yet I have occasionally to treat some of the most obstinate forms that others have failed in curing. . . .

"Remedial treatment comprises both constitutional and local measures. Constitutional treatment consists in the administration of tonics to restore a healthy state of both the muscular and nervous systems, and in the use of sedatives to allay irritability. Of tonics, the preparations of iron are most efficacious; and particularly the sesquichloride of iron, in doses of from fifteen to thirty drops in half a wineglassful of water thrice daily. Strychnia, in doses of one-twelfth of a grain, made into a pill, with or without the sulphate of iron, forms a tonic anti-spasmodic preparation of great value. Sedatives are less beneficial than tonics; yet, in spasmodic spermatorrhœa, a night pill of belladonna or of hyoscyamus and camphor, may perhaps be advantageously given to subdue the local irritability which favors the seminal emissions. Suppositories of pil. saponis, ten grains, are, according to my experience, preferable as acting topically. The cold hip-bath, or sluicing the perineum with cold water night and morning, is a most serviceable local tonic. Hygienic measures must also be carefully attended to as part of the constitutional treatment. A plain, unstimulating, nutritious diet is essentially requisite, rigorously excluding peppers and other condiments, which are apt to irritate the rectum and provoke seminal emissions during defecation.

The stomach should never be overloaded by a heavy meal ; and a daily action of the bowels should be secured by gentle aperients when necessary. A dinner pill consisting of the compound rhubarb pill with hyoscyamus, will answer this purpose far better than colocynth or any other irritant purgative. The invigorating influence of daily exercise in the open air and of outdoor amusements, with perhaps change to a bracing climate, can scarcely be overlooked ; but relaxation from study or the excitement of business, and freedom if possible from the pressure of anxiety are no less restorative, while every encouragement must be given to cheerfulness and hope. All this constitutional treatment not unfrequently fails to cure the spermatorrhœa ; the local irritability of the prostatic urethra still remaining. Recourse must be had to the application of nitrate of silver along the under surface of this portion of the urethra, to the orifices of the ejaculatory ducts."—*Gant.*

Humphrey thinks that when the emissions return, "more than once in a fortnight, and especially if they amount to two, three or more in a week, as is sometimes the case, they should receive attention." With regard to treatment he says : "The attention to these sensations, real and imaginary, and the constant dwelling upon the matter, tends, unquestionably, to aggravate the malady. My first effort, therefore—having requested the patient to burn any book or pamphlet he may have upon the subject—is to restore a calm and less anxious frame of mind, by assuring him that a great part of his apprehensions are groundless, giving him good hope of recovery, in great measure at least, recommending him to engage in out-door amusements and to enjoy the cheerful society of his friends, not to relinquish his reading, but to work less hard at it, especially towards night, to go to bed early and rise early. I am unwilling to keep up

the idea of invalidism by prescribing medicine or particular diet, and simply warn him against overloading his stomach, as that is likely to induce the discharges. These assurances and simple directions are often sufficient, and many have told me of the relief and happiness they have derived from them. This failing, and in worse cases, more particular attention must be paid to the digestive organs and their secretions, especially when the urine is turbid; mild aperients may be required to prevent accumulations in the intestines, and a light diet must be enforced. In those who are robust, an alkali may be given at night, and in those who are weak, quinine or steel. Better than all medicines are relaxation from work, with change of air, traveling, and sea-side residence. Often, however, these cannot be carried out, or are available only for a time; and under the medicinal treatment the discharges are sometimes not sufficiently diminished. Perhaps the intervals between them are lengthened, and they return two or three nights in succession, instead of being more frequent and with more regular intervals. I have not found cold ablutions do much good, though washing the exterior of the glans penis, and keeping it clear of secretion, is of some service by lessening the irritability of that part. The application of nitrate of silver by means of the porte-caustique to the inner surface of the prostatic portion of the urethra, where the ejaculatory ducts open, is unquestionably, in some cases, an efficient adjuvant to the means just described for checking or moderating this malady. It has been employed by many persons since it was brought prominently into notice by Lallemand; and I do not know that mischievous results have attended its use in competent hands. Care should be taken that the instrument is sound, for the solder connecting the part which carries the caustic is liable to

be decomposed. This once gave way, leaving the end of the instrument and the caustic in the prostate of a gentleman whose urethra I was cauterizing. It was voided with the urine in the course of the following day, and, though he suffered more than was intended, no evil resulted. The caustic may be applied pretty freely, the instrument being known to be in the prostatic region by the distance to which it has been passed, and by the sensitiveness of the part, or, more certainly, by feeling with the finger in the rectum. A good deal of irritation, pain, with frequent bloody micturition and some discharge follow the operation, with, perhaps, seminal emissions at night. These subside in a few days, and the good effect is at once shown by a cessation of the emissions. In many cases, however, they return after a period, requiring a repetition of the remedy, perhaps two or three times ; and in some cases no good results from it. I am aware that this proceeding is objected to by some whose opinions deserve attention as unsafe, by others as empirical, and by others as unphysiological and unpathological. It can scarcely be regarded as unphysiological, when we observe the effect which is produced on the whole length of a tube or a series of tubes by irritation at any one part of the lining membrane, especially if that part be near an orifice, how titillation of the fauces will cause vomiting, or of the larynx coughing, or of the rectum diarrhoea and tenesmus. It cannot be very unsafe or even injurious, or we should ere this have heard of more ill-effects produced by it. Neither do I think it so empirical and unpathological as some seem to regard it, mistaking, as I cannot help fancying, the real seat of the malady, which appears to me to be in the prostatic part of the urethra more distinctly than in any other portion of the generative apparatus. I judge this to be so, because there is usually a preternatural

sensitiveness of that part elicited by the passage of instruments or by pressure with the finger. Frequently there is uneasiness or actual pain there, especially after the emissions ; and an irritation of this part by any cause is likely to induce the emissions. It is the only part in which anything distinctly abnormal in the sensations is experienced ; the testes, vasa deferentia, vesiculæ seminales, show little or no tenderness or other sign of disturbance. We are, therefore, warranted in considering this part to be at fault, and in applying to it that salt which is often found to allay irritability or a chronic inflammatory condition in other mucous membranes. Above all, there is the more cogent argument that good frequently results from its use. We must not, however, be too sanguine in our expectations, for, as has been already said, the benefit is sometimes only temporary, and in some cases the treatment fails altogether. In some slight cases benefit is derived from the occasional passage of a metallic instrument into the bladder and allowing it to remain there ten or twenty minutes. It is commonly well to try this before resorting to cauterization. Accompanying this malady or independent of it, there is sometimes a discharge from the urethra of tenacious fluid, like white of egg, in small quantity, following the urine, or expelled during the evacuation of the feces, especially when straining is required for that purpose. This symptom causes great alarm to the patient, as he conceives that he is suffering from a continual escape of the semen. Such, however, is not the case. I have examined this fluid passed by several persons, and have never found any spermal elements in it. It proceeds apparently from the prostate gland, and its presence in sufficient quantity to issue from the urethra is an indication of a relaxed condition of the ducts of the gland, permitting the secretion to

be expressed during the voiding of the urine or feces. It generally ceases or diminishes under a tonic regimen and attention to the state of the bowels. The commonly received opinion that the debility and other symptoms experienced in these cases is due chiefly to the loss of spermatic fluid, is a mistaken one, inasmuch as the exhaustion consequent on the emission bears very little relation to the quantity of the fluid discharged, or the amount of spermatic elements contained in the fluid. As the disorder progresses, and the emissions are more frequent, the proportion, indeed the actual quantity, of the spermatozoa decreases, the discharge consisting chiefly of the secretions of the vesiculæ seminales and the prostate gland. The drain upon the system is rather through the nervous system than through the testicle, and the exhaustion experienced after each occasion is consequent upon a loss of nervous force rather than upon a loss of the secretion of the generative organ.

“ The question of impotence, with its contingent,—the unadvisability of matrimony—is one on which it is difficult to write, inasmuch as there is not much very definite to be written. In deciding it, it is usually necessary to allow a considerable margin for the nervousness of the patient. A quiescent state of the organs, consequent on long control of the passions, is not to be regarded as an obstacle, because they may be roused into activity when appropriate circumstances arise; and after a long continuance and frequent repetition of nocturnal emissions, the organs usually retain sufficient vigor to admit of improvement under the influence of matrimony. It has happened to me often to be consulted on this subject, and I have very rarely felt it necessary to give a discouraging opinion. In the case of one gentleman, who from early life had been subject to

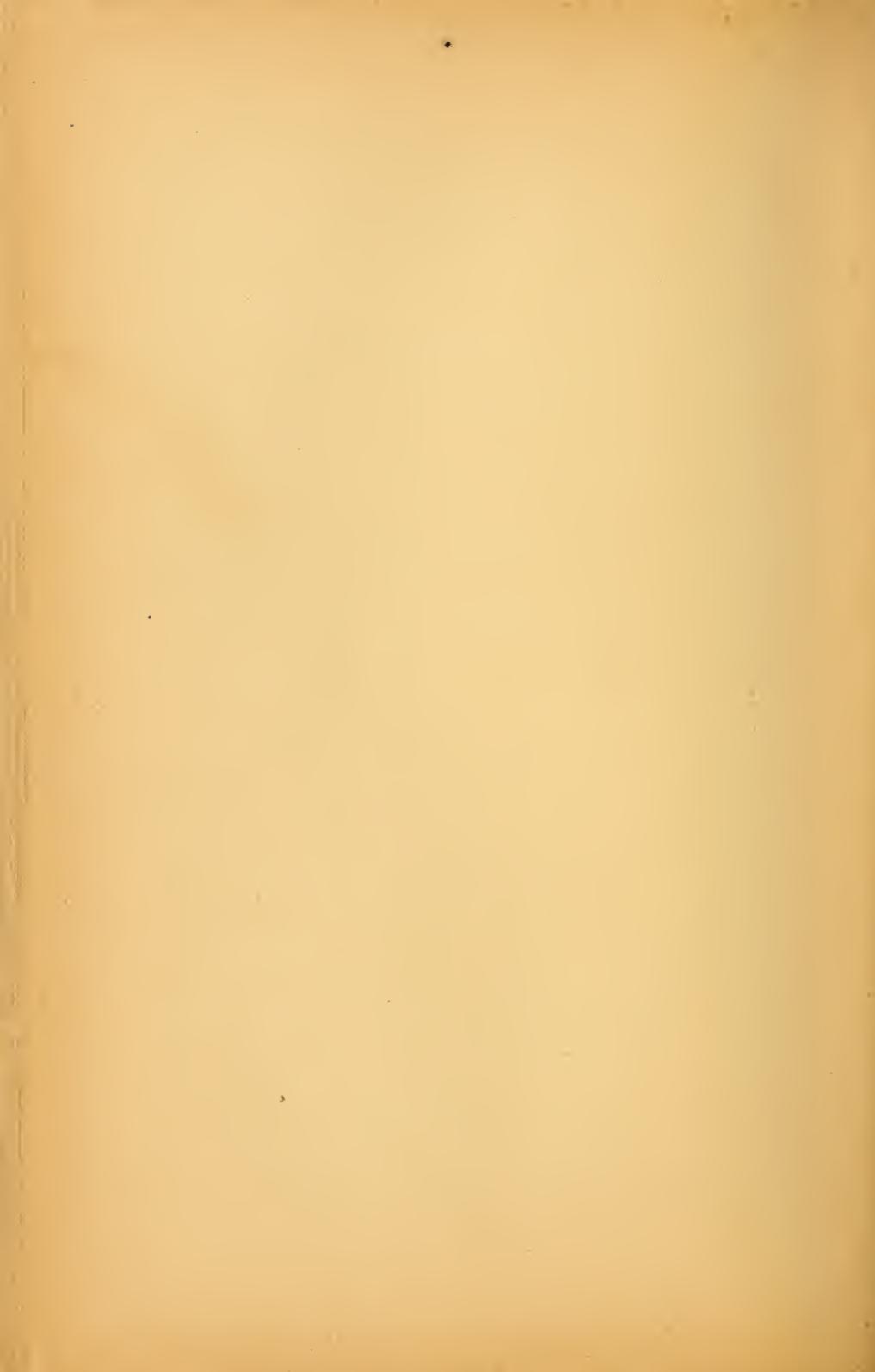
very frequent emissions, who had long ceased to have erections or desire, and whom a variety of treatment, including cauterization of the urethra, conducted by different persons, had failed to give relief, my advice was that he should remain a bachelor. Very soon afterwards he married and had a family.

"It has been recommended that in doubtful cases the experimentum should be made *in corpore vili*. This appears to me to be useless as well as wrong, for the experiment thus made as a test is no real test, and, as might be expected, has ended in disappointment. I know a gentleman, in every respect, as I believe, well qualified to be a husband, and at one time anxious to be so, who has been prevented from marrying by the failure of this test, to which he, most reluctantly and needlessly, assented, in deference to the advice of an eminent surgeon whom he consulted. The indications derivable from external appearance are of little value ; and suspicions based upon them have repeatedly proved to be groundless. There are certain obvious disqualifications, such as imperfect formations or diseased conditions of the necessary organs, and an entire absence of erections or desire. Where such disqualifications exist, matrimony is rarely contemplated. Where they are absent the surgeon is seldom justified in giving an unfavorable verdict, the instances being few in which, by judicious treatment, the patient may not be fitted for matrimony. To the encouragement to matrimony it is well to add the hint that though, for various reasons, the rite may not be at first consummated, yet that, in all probability, it will be so before long. This may prevent unnecessary disappointment or despair. I have known premature separation carried out, indeed hurried on by the medical man, when there is reason to think that a little management and patience might have resulted in a happy union. The whole of this question is

fraught with so much anxiety and excitement to the person concerned, that the mind is liable to be thrown off its balance, and the most deplorable consequences to ensue. In some cases, doubtless, there is cause for the anxiety, but in many the apprehensions are groundless, and happy is it if a man when thus racked with doubts can bring himself to make a confidant of, and disburden himself freely to, some judicious medical adviser, who will assure him that such cases are not uncommon, and will, perhaps, give him the often-quoted recommendation of Hunter, to make up his mind to abstain for a time. In all such cases it is necessary to take the general state of health into account, for any debilitating cause, such as dyspepsia, diarrhœa, mental anxiety, etc., especially when there are phosphates or oxalate of lime in the urine—is liable to be attended with inability, which may be only of a temporary nature, and will yield to appropriate treatment. As a general rule, in the healthy person, the recurrence of desire and power, more particularly the former, decreases gradually with advancing years. Sometimes it does not cease till a late period. This, however, varies much. In those who have abused the organs, or indulged their amorous propensities to excess in early life, the cessation takes place sooner than in others. We learn that the lords of the harem are not unfrequently impotent at thirty or forty ; and in this country the same occurs to persons who have been addicted to excite the organs preternaturally by giving way to lascivious thoughts, and in other ways. Any debilitating influence, whether it be mental depression or enervating bodily disease, indigestion, phthisis, diabetes, etc., produces more or less of the same effect, and it has been remarked by Mr. Curling that 'the testes of persons who die of chronic lingering diseases are almost invariably soft and inelastic.'

When incised, their internal structure seems to contain but few bloodvessels, is pale, apparently shrunk and dry, and the little fluid that can be squeezed from it is destitute of spermatozoa.'

"It seems also that long-continued continence induces an earlier cessation of the capability of function than does moderate indulgence. And after long disuse the attempt to rouse these organs into activity at a late period of life, even if successful, is not altogether without risk to the general health. The excitement consequent on it, is liable to induce much prostration, which may be followed by paralysis, amaurosis, affections of the heart, or other disorders. I suspect there is foundation for the remark that these ill-effects are more likely to occur in the case of widowers marrying after a considerable interval, than in those who have not been before married."



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# SEXUAL NEURASTHENIA

(NERVOUS EXHAUSTION.)

Its Hygiene, Causes, Symptoms and Treatment,  
WITH A CHAPTER ON  
Diet for the Nervous,

BY GEORGE M. BEARD, A.M., M.D.,

Formerly Lecturer on Nervous Diseases in the University of the City of New York;  
Fellow of the New York Academy of Medicine; Author of "Our  
Home Physician," "Hay Fever," one of the Authors of  
"Medical and Surgical Electricity," etc.

[POSTHUMOUS MANUSCRIPT.]

EDITED BY A. D. ROCKWELL, A.M., M.D.

Fellow of the New York Academy of Medicine, and Electro-Therapeutist to the  
N. Y. State Woman's Hospital; one of the Authors of "Medical  
and Surgical Electricity," etc.

The philosophy of this work is based on the theory that there is  
a special and very important and very frequent clinical variety of neurasthenia  
(nervous exhaustion) to which the term sexual neurasthenia  
(sexual exhaustion) may properly be applied.

While this variety may be and often is involved as cause or effect  
or coincident with other varieties—exhaustion of the brain, of the spine,  
of the stomach and digestive system—yet in its full development it can  
be and should be differentiated from hysteria, simple hypochondria, in-  
sanity, and various organic diseases of the nervous system, with all of  
which it had until lately been confounded.

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which have hitherto been almost universally described as diseases by  
themselves, are philosophically and clinically analyzed. These sym-  
ptoms, as such, do not usually exist alone, but are associated with other  
local or general symptoms of sexual neurasthenia herein described.

The causes of sexual neurasthenia are not single or simple but  
complex; evil habits, excesses, tobacco, alcohol, worry and special ex-  
citements, even climate itself, are the great predisposing causes.

The subject is restricted mainly to sexual exhaustion **as it exists in the male**, for the reason that the symptoms of neurasthenia, as it exists in females, are, and for a long time have been, understood and recog-  
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driacs, just as females suffering from now clearly explained uterine and  
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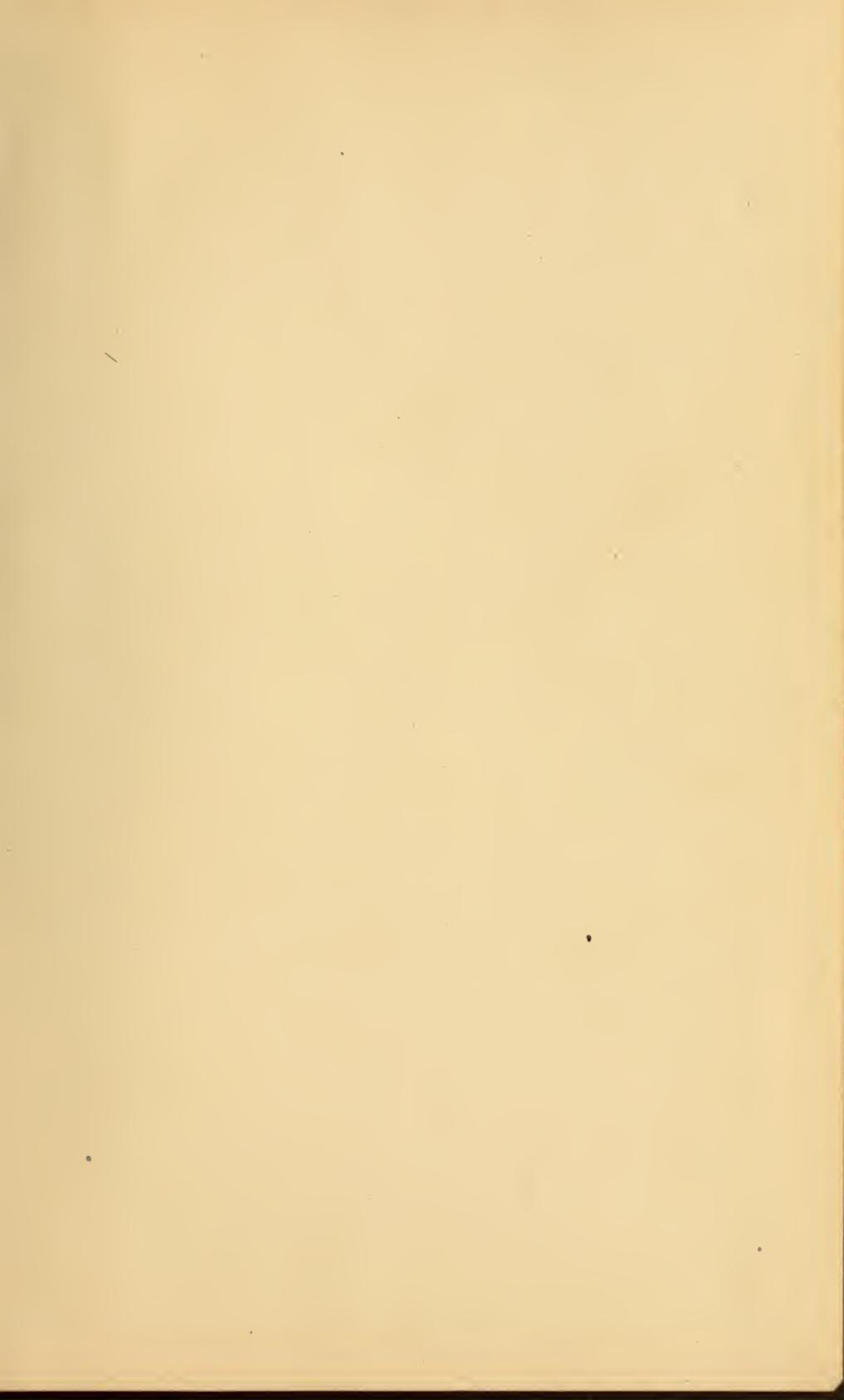
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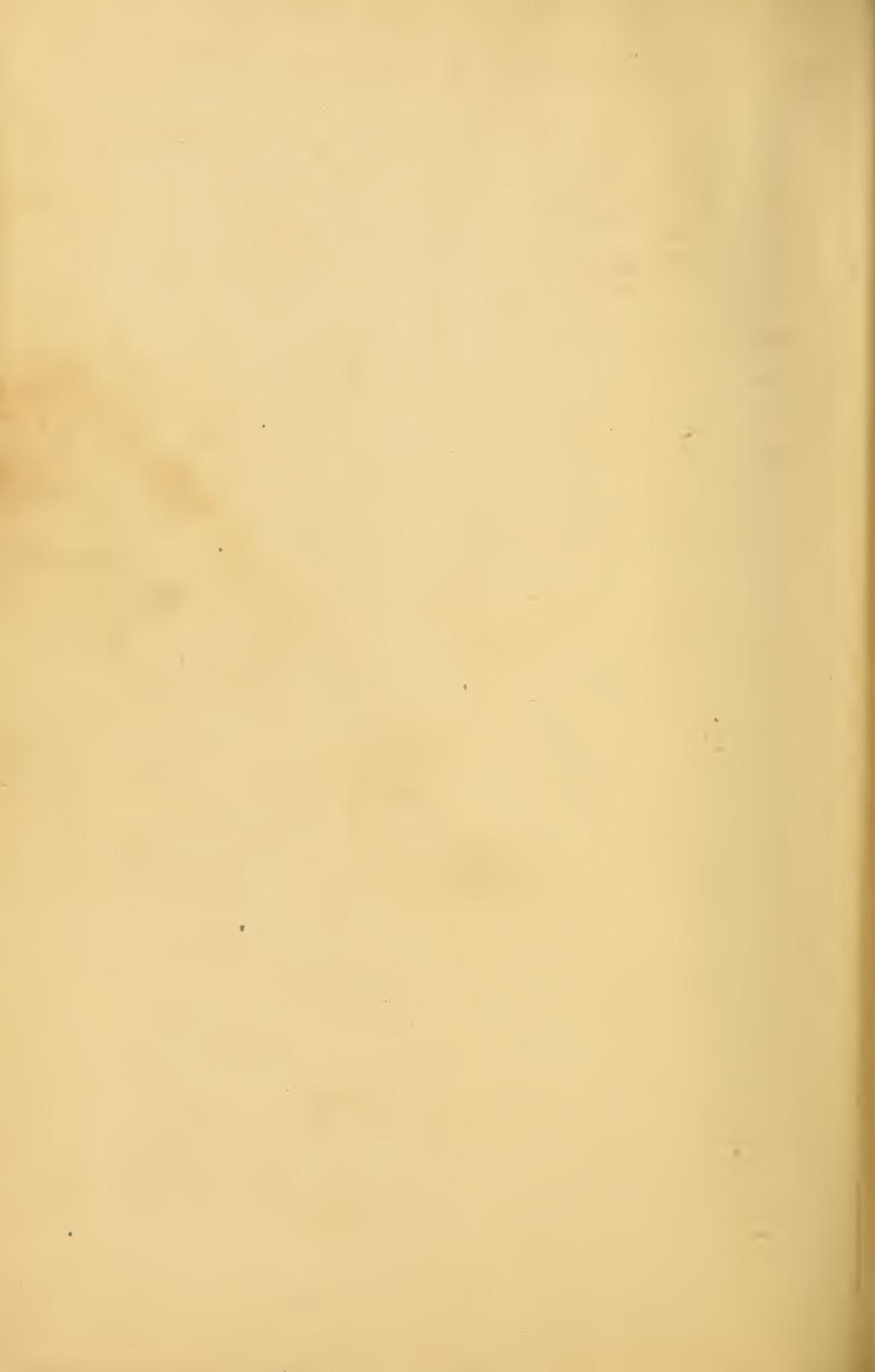
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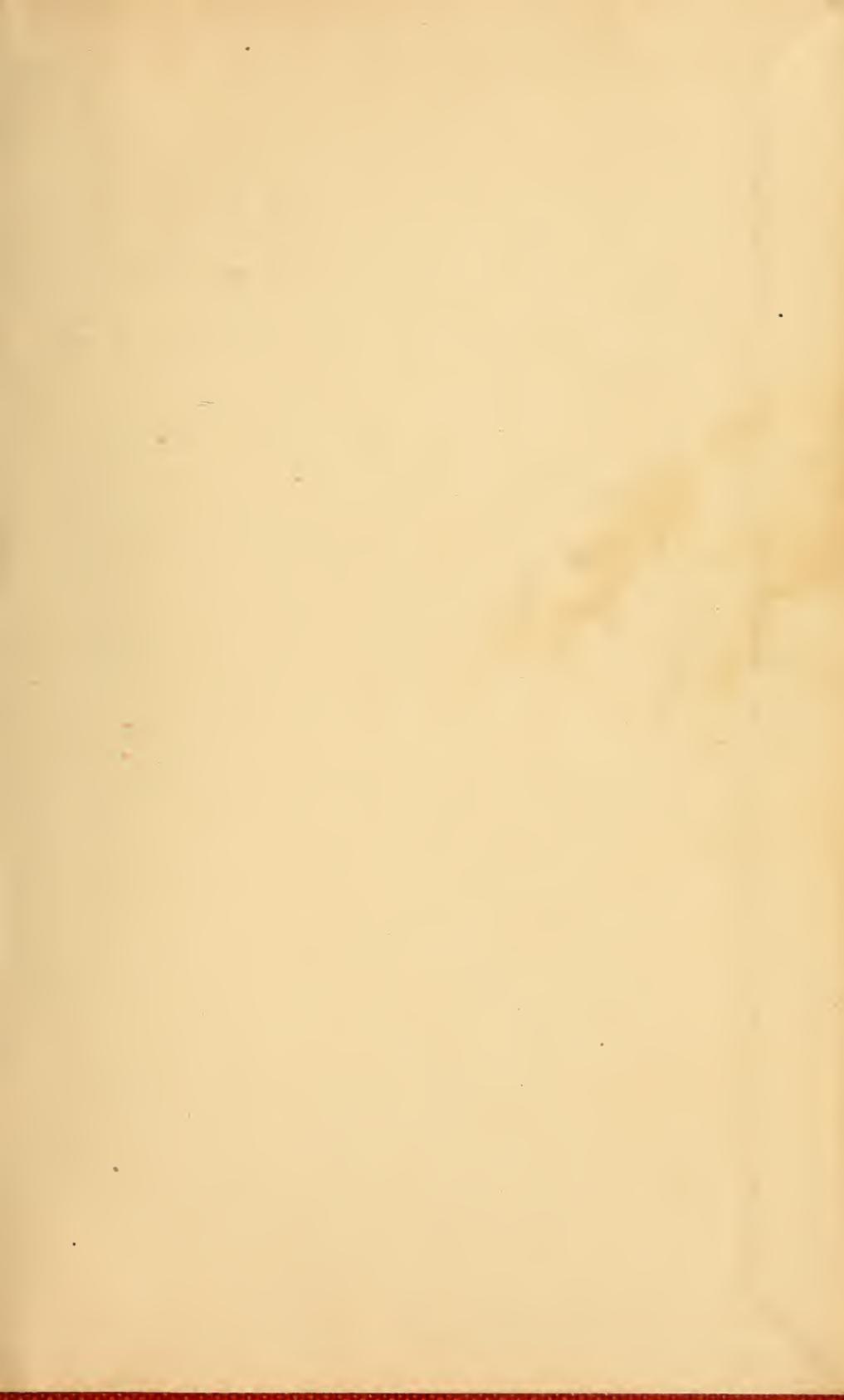
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